



NAVY TRAINING SYSTEM PLAN
FOR THE
INTEGRATED MECHANICAL DIAGNOSTICS
SYSTEM

N88-NTSP-A-50-0105/P

DECEMBER 2002

**INTEGRATED MECHANICAL DIAGNOSTICS
SYSTEM****EXECUTIVE SUMMARY**

This Navy Training System Plan (NTSP) has been developed to identify the life cycle manpower, personnel, and training requirements associated with the Integrated Mechanical Diagnostics System (IMDS). The IMDS is an Acquisition Category IVT program developed under the Commercial Operations and Support Savings Initiative and is in the Limited Rate Initial Production Phase of the Defense Acquisition System. Current plans are to install the IMDS aboard Navy SH-60B Aircraft and Marine Corps CH-53E Aircraft. However, it is envisioned that all Navy and Marine Corps rotary wing aircraft will be provided with IMDS capabilities in the future. IMDS Initial Operating Capability is scheduled for October 2003 in the CH-53E and May 2004 in the SH-60B. The Navy Support Date and Material Support Date have not been established.

The IMDS performs diagnostic, health, and usage monitoring functions on individual rotary wing aircraft through the use of computer processors, sensors, and diagnostic software. An associated ground-based analysis and diagnostic system interfaces with a Naval Aviation Logistics Command Management Information System (NALCOMIS) equipped Optimized-Organizational Maintenance Activity (OOMA).

The IMDS will be operated by Marine Corps CH-53E Rotary Wing Pilots with Military Occupational Specialty (MOS) 7566, Navy SH-60B Rotary Wing Pilots with 1311 and 1312 Designator Codes, Marine Corps CH-53E Enlisted Aircrew personnel with MOS 6173, and Navy Enlisted SH-60B Aircrew personnel with Navy Enlisted Classification (NEC) 7873.

Maintenance of IMDS will be conducted at two levels, organizational and depot. Organizational level maintenance will be performed on the CH-53E by Marine Corps Communication/Electrical System Technicians with MOS 6323, Airframe Mechanics with MOS 6153, and Engine Mechanics with MOS 6113. SH-60B maintenance will be performed by Navy Aviation Electronics Technicians with NECs 8376 or 8876 and Electrician's Mates, Structural Mechanics, and Machinist's Mates with NECs 8378 or 8878. The manufacturer will perform all depot level maintenance.

The manufacturer is providing initial operator and maintainer training. Follow-on operator training will be conducted by CH-53E and SH-60B Fleet Readiness Squadrons. Existing aircrew courses will be updated with IMDS information. Follow-on maintainer training will be provided by the Naval Air Maintenance Training Marine Units and Naval Air Maintenance Training Units supporting the CH-53E and SH-60B aircraft. Existing organizational level maintenance courses will be updated with IMDS information. A Ready for Training date for follow-on operator and maintainer training is to be determined.

Current manpower requirements, identified in Navy Activity Manpower Documents and Marine Corps Tables of Organization are projected to be sufficient to support IMDS without change. However, a change in course length or training throughput has the potential to increase

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manpower and/or instructor requirements; this potential issue will continue to be evaluated as courses are modified.

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LIST OF ACRONYMS

INTEGRATED MECHANICAL DIAGNOSTICS SYSTEM

LIST OF ACRONYMS

| | |
|----------------|--------------------------------------------------|
| AD | Aviation Machinist's Mate |
| AE | Aviation Electrician's Mate |
| AFCS | Automatic Flight Control System |
| ALSP | Acquisition Logistics Support Plan |
| AM | Aviation Structural Mechanic |
| AMT | Avionics Maintenance Trainer |
| AMTCS | Aviation Maintenance Training Continuum System |
| AOB | Average Onboard |
| APT | Aircrew Procedures Trainer |
| AT | Aviation Electronics Technician |
| AW | Aviation Antisubmarine Warfare Operator |
| | |
| BIM | Blade Inspection and Maintenance |
| BMP | Bearing Monitoring Panel |
| BUNO | Bureau Number |
| | |
| CANTRAC | Catalog of Navy Training Courses |
| CDU | Cockpit Display Unit |
| CFE | Contractor-Furnished Equipment |
| COMLANTFLT | Commander, Atlantic Fleet |
| COMPACFLT | Commander, Pacific Fleet |
| CMT | Composite Maintenance Trainer |
| CNO | Chief of Naval Operations |
| COMNAVAIRESFOR | Commander Naval Air Reserve Force |
| COMOPTEVFOR | Commander, Operational Test and Evaluation Force |
| | |
| DT | Development Test |
| DTU | Data Transfer Unit |
| | |
| FRS | Fleet Readiness Squadron |
| FY | Fiscal Year |
| | |
| GBS | Ground-Based Station |
| GFE | Government-Furnished Equipment |
| GPS | Global Positioning System |
| GPWS | Ground Proximity Warning System |
| | |
| HMT | Helicopter Marine Training Squadron |

INTEGRATED MECHANICAL DIAGNOSTICS SYSTEM

LIST OF ACRONYMS

| | |
|----------------|----------------------------------------------------------------|
| IMDS | Integrated Mechanical Diagnostics System |
| IOC | Initial Operational Capability |
| IPB | Illustrated Parts Breakdown |
| LAMPS | Light Airborne Multi-Purpose System |
| LRIP | Limited Rate Initial Production |
| LRU | Line Replaceable Unit |
| MATMEP | Maintenance Training Management and Evaluation Program |
| MCAS | Marine Corps Air Station |
| MOS | Military Occupational Specialty |
| MPU | Main Processor Unit |
| MPULV | Main Processing Unit Loader Verifier |
| MRC | Maintenance Requirements Card |
| MSD | Material Support Date |
| MTU | Maintenance Training Unit |
| NA | Not Applicable |
| NALCOMIS | Naval Aviation Logistics Command Management Information System |
| NAMP | Naval Aviation Maintenance Program |
| NAMTRA MARUNIT | Naval Air Maintenance Training Marine Unit |
| NAMTRAGRU DET | Naval Air Maintenance Training Group Detachment |
| NAMTRAU | Naval Air Maintenance Training Unit |
| NAS | Naval Air Station |
| NATOPS | Naval Air Training and Operating Procedures Standardization |
| NAVAIR | Naval Air Systems Command |
| NAVPERSCOM | Naval Personnel Command |
| NEC | Navy Enlisted Classification |
| NETC | Navy Education and Training Command |
| NS | Naval Station |
| NSD | Navy Support Date |
| NTSP | Navy Training System Plan |
| OATMS | OPNAV Aviation Training Management System |
| OBS | Onboard System |
| OFT | Operational Flight Trainer |
| OOMA | Optimized Organizational Maintenance Activity |
| OPNAV | Office of the Chief of Naval Operations |

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LIST OF ACRONYMS

| | |
|-----------|---------------------------------------------------------------------------|
| OPNAVINST | Office of the Chief of Naval Operations Instruction |
| OPO | OPNAV Principal Official |
| ORD | Operational Requirements Document |
| OT | Operational Test |
| PCMCIA | Personal Computer Memory Card International Association |
| PEO(A) | Program Executive Office (Air ASW, Assault, and Special Mission Programs) |
| PMA | Program Manager, Air |
| RAST | Recovery Assist Securing and Traversing |
| RDC | Remote Data Concentrator |
| RFT | Ready For Training |
| ST | Special Tool |
| TA | Training Agency |
| TBD | To Be Determined |
| TD | Training Device |
| TEE | Training Effectiveness Evaluation |
| TEMP | Test and Evaluation Master Plan |
| TSA | Training Support Agency |
| TTE | Technical Training Equipment |
| ULSS | User Logistics Support Summary |
| VIDS/MAF | Visual Item Display System/Maintenance Action Form |
| WST | Weapon System Trainer |
| WTT | Weapon Tactics Trainer |

**INTEGRATED MECHANICAL DIAGNOSTICS
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PREFACE

This Proposed Navy Training System Plan (NTSP) for the Integrated Mechanical Diagnostics System (IMDS) updates the Draft IMDS NTSP, A-50-0105/D, dated August 2002, in accordance with guidelines set forth in the Navy Training Requirements Documentation Manual, Office of the Chief of Naval Operations (OPNAV) Publication P-751-1-9-97.

This Proposed NTSP incorporates comments resulting from the review of the Draft NTSP, N88-NTSP-A-50-0105/D, of August 2002. Comments were received from the Naval Education and Training Command (NETC), Naval Education and Training Professional Development and Technology Center (NETPDTC), Naval Air Maintenance Training Group Headquarters (NAMTRAGRU HQ), Naval Air Maintenance Training Marine Unit (NAMTRA MARUNIT) New River, and Naval Air Maintenance Training Unit (NAMTRAU) North Island. The comments are general in nature, making several corrections to course information, and clarifying program information and potential issues.

aboard Navy SH-60B and Marine Corps CH-53E aircraft. However, it is envisioned that all Navy and Marine Corps rotary wing aircraft will be provided with IMDS capabilities in the future.

2. Foreign Military Sales. No Foreign Military Sales are planned for the IMDS. However, the IMDS has potential applicability for all Department of Defense rotary wing aircraft.

E. DEVELOPMENTAL TEST AND OPERATIONAL TEST

1. Developmental Test and Evaluation. All Developmental Test (DT) evolutions are being conducted under the cognizance of NAVAIR Patuxent River, Maryland.

a. CH-53E IMDS

(1) Developmental Test-IIA. DT-IIA was performed on a prototype IMDS installed on a CH-53E Aircraft, Bureau Number (BUNO) 163086, at NAWCAD Patuxent River from September 1999 to September 2000. DT-IIA substantiated the basic system functional performance and hardware configuration stability sufficient to support a Limited Rate Initial Production (LRIP) decision in August 2000.

(2) Developmental Test-IIB. DT-IIB was performed on an enhanced prototype IMDS installed on the same CH-53E Aircraft used for DT-IIA. Data collection flights were conducted by Helicopter Marine Training Squadron (HMT) 302 at New River, North Carolina from February 2002 through March 2002.

(3) Developmental Test-IIC. DT-IIC began at NAVAIR Patuxent River in April 2002 using an IMDS, which had been updated to a production representative configuration, installed on the same CH-53E Aircraft used for DT-IIA and DT-IIB. DT-IIC is scheduled for completion in late December 2002.

(4) Developmental Test-IIIA. DT-IIIA will be performed using the prototype IMDS from DT-IIC that will be updated to reflect the latest production configuration. DT-IIIA is scheduled to begin in May 2003 and conclude in January 2004.

(5) Developmental Test-IIIB. DT-IIIB will be performed using the prototype IMDS from DT-IIIA. DT-IIIB is scheduled to begin in February 2004 and conclude in July 2004.

b. SH-60B IMDS

(1) Developmental Test-IIA. DT-IIA was successfully performed on a prototype IMDS installed on a SH-60B Aircraft, BUNO 164176, at NAVAIR Patuxent River from September 1999 to December 2001. DT-IIA substantiated the basic system functional performance and hardware configuration stability sufficient to support an LRIP decision in April 2001.

(2) Developmental Test-IIB. DT-IIB was performed on an enhanced prototype IMDS installed on the same SH-60B Aircraft used for DT-IIA at NAVAIR Patuxent River from January 2002 to July 2002.

(3) Developmental Test-IIC. DT-IIC will be performed using the same prototype IMDS from DT-IIA and is scheduled to begin in January 2003 and conclude in May 2003.

(4) Developmental Test-IIIA. DT-IIIA will be performed using the prototype IMDS from DT-IIC, updated to reflect the latest production configuration and is scheduled to begin in October 2003 and conclude in August 2004.

(5) Developmental Test-IIIB. DT-IIIB will be performed using the prototype IMDS from DT-IIIA and is scheduled to begin in August 2004 and conclude in December 2004.

2. Operational Test and Evaluation. All Operational Test (OT) evolutions will be conducted under the cognizance of the Commander Operational Test and Evaluation Force (COMOPTEVFOR) Norfolk, Virginia.

a. CH-53E IMDS

(1) Operational Test-IIA. OT-IIA will be conducted using production representative IMDS hardware and software installed in three CH-53E Aircraft. Successful completion of OT-IIA will support a recommendation regarding fleet introduction of IMDS in CH-53E Aircraft. OT-IIA began in November 2002 and will conclude in April 2003.

(2) Operational Test-IIIA. OT-IIIA will be conducted using production representative IMDS hardware and software installed in three CH-53E Aircraft and is scheduled to begin in September 2004 and conclude in March 2005.

b. SH-60B IMDS

(1) Operational Test-IIA. OT-IIA will be conducted using production representative IMDS hardware and software installed in three SH-60B Aircraft. Successful completion of OT-IIA will support a recommendation regarding fleet introduction of IMDS in SH-60B Aircraft. OT-IIA is scheduled to begin in February 2003 and conclude in August 2003.

(2) Operational Test-IIIA. OT-IIIA will be conducted using production representative IMDS hardware and software installed in three SH-60B Aircraft and is scheduled to begin in February 2005 and conclude in September 2005.

F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED. The A/E-37T-32 Vibration Analysis Test Set (VATS) used on existing platforms will be phased out after IMDS has reached Full Operational Capability.

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description. The IMDS will provide timely and accurate information to enhance aircraft maintenance and safety by identifying and precluding premature failure of aircraft systems. Prior to flight, a Personal Computer Memory Card International Association (PCMCIA) memory card (“Credit Card” memory) is loaded with relevant aircraft BUNO data that resides in the IMDS Ground-Based Station (GBS), which is then downloaded into the IMDS Onboard System (OBS). During flight, information such as vibration data, diagnostic results, and aircraft status information is recorded onto the PCMCIA memory card. After each flight, the PCMCIA is removed from the aircraft and the information downloaded into NALCOMIS OOMA. The IMDS will use this post-flight data to generate any required Visual Item Display System/Maintenance Action Forms (VIDS/MAF), make logbook entries, and perform configuration and maintenance management. The IMDS will provide the maintenance manager with Rotor and Tail Balance adjustment trend data, engine diagnostic and trend data, Scheduled and Periodic Maintenance interval adjustments with trend data, life limited component usage data, fatigue life data, exceedance tracking, and parts tracking.

a. Onboard System. The OBS is comprised of the following major components:

(1) Cockpit Display Unit. The Cockpit Display Unit (CDU) advises the aircrew of the IMDS OBS status, aircraft component health, and recommended track and balance adjustments. The CDU is also designed to allow the aircrew to trigger system data acquisition during flight.

(2) Data Transfer Unit. The Data Transfer Unit (DTU) records all data received from the Main Processor Unit (MPU) onto a PCMCIA memory card. The DTU is also designed to allow transfer of information such as maintenance performed since last flight and changes to the system’s configuration tables from the GBS via the PCMCIA.

(3) Remote Data Concentrator. Two Remote Data Concentrators (RDC) collect aircraft status data. Each RDC converts the data it receives to a data stream that is sent to the MPU through a single line cable bus interface.

(4) Main Processor Unit. The MPU controls the IMDS by performing the following functions: acting as the communications link between all of the system’s main components, calculating flight regimes, calculating track and balance solutions, monitoring drive train health status, and processing all accelerometer, tachometer, and tracker raw data. Additionally, the MPU receives information from the RDCs, the drive train and Rotor Trim And Balance System (ROBATS) accelerometers, the Ground Proximity Warning System (GPWS), Air Data Computer, the Automatic Flight Control System (AFCS), the Global Positioning System (GPS), and the Bearing Monitoring Panel (BMP) when installed.

(5) Optical Rotor Blade Tracker. The Optical Rotor Blade Tracker provides blade track height and lead and lag data by timing pulses of blade passages from which the measurements are derived. This timing data is then converted to distance data by use of a sensitivity constant based on the blade sensor installation geometry.

(6) Junction Boxes. Junction Boxes are used to collect data from a multitude of aircraft signals. Aircraft wiring that carry signals of interest are routed to the Junction Boxes where the signals are split and routed back to the aircraft source and to the RDC.

(7) Remote Charge Converters. One Remote Charge Converter (RCC) is mounted near each engine location. The RCC converts the incoming resistance value from the engine accelerometers to a workable voltage signal. This signal is routed directly to the MPU for processing.

(8) Accelerometers. IMDS employs 32 drive train and gearbox accelerometers, six engine accelerometers, and four track and balance accelerometers. Signals from the accelerometers are fed into the MPU via the RDC as raw data signals where they are digitized and processed through Fast Fourier Transforms (FFT) and other diagnostics techniques. The results from these checks will normally be discarded. However, the raw data will be saved if prompted by the Pilot or if a fault is suspected.

(9) Tachometers. IMDS employs three tachometers, one each for the tail gearbox, main gearbox, and main rotor. Signals from the tachometers are fed into the MPU via the RDC as raw data signals where they will be digitized and processed through FFTs and other diagnostics techniques. The results from these checks will normally be discarded. However, the raw data will be saved if prompted by the Pilot or if a fault is suspected.

b. Ground-Based System. The GBS is a software module consisting of a Master Software Disk, Flight Software Data Disk, and a Configuration Data Disk that resides within an optimized NALCOMIS ground station. The GBS also includes a Main Processing Unit Loader Verifier (MPULV) that is used to transfer data to the PCMCIA prior to flight and to load data collected during flight from the PCMCIA memory card into the GBS.

2. Physical Description

| ITEM NOMENCLATURE | HEIGHT | DEPTH | WIDTH | WEIGHT |
|-----------------------------|-----------------------------------------------------|-----------|----------|-----------|
| CDU | 3.18 in. | 8.93 in. | 3.37 in. | 4.7 lbs |
| DTU | 1.50 in. | 6.50 in. | 5.75 in. | 2.1 lbs. |
| RDC | 2.30 in. | 7.70 in. | 6.72 in. | 3.2 lbs. |
| MPU | 7.60 in. | 12.60 in. | 4.90 in. | 15.5 lbs. |
| Optical Rotor Blade Tracker | 5.10 in. | 5.10 in. | 3.60 in. | 1.1 lbs. |
| Junction Box | Sizes and weights vary depending on the application | | | |
| RCC | 100 mm | 95 mm | 107 mm | 620 g |
| Drive Train Accelerometer | 0.56 in. | 0.55 in. | 0.75 in. | 26 g |

| ITEM NOMENCLATURE | HEIGHT | DEPTH | WIDTH | WEIGHT |
|---------------------------------------|----------|----------|----------|--------|
| Engine High Temperature Accelerometer | 25 mm | 356 mm | 15 mm | 8 oz. |
| Engine Accelerometer | 1.36 in. | 1.81 in. | 1.50 in. | 8 oz. |
| Uniaxial Rotor Blade Accelerometer | 1.40 in. | 1.87 in. | 1.14 in. | 80 g |
| Biaxial Rotor Blade Accelerometer | 1.40 in. | 1.87 in. | 1.14 in. | 80 g |
| Triaxial Rotor Blade Accelerometer | 1.14 in. | 1.87 in. | 1.40 in. | 90 g |
| Tail Gearbox Tachometer | 2.45 in. | 2.70 in. | 1.50 in. | 105 g |
| Main Gearbox Tachometer | 2.45 in. | 2.70 in. | 1.50 in. | 105 g |
| Main Rotor Tachometer | 2.45 in. | 2.70 in. | 1.50 in. | 105 g |
| MPULV | 2.00 in. | 4.00 in. | 6.00 in. | 1.5 lb |
| PCMCIA Memory Card | 5 mm | 85.6 mm | 54 mm | 33 g |

3. New Development Introduction. The IMDS will be retrofitted into existing aircraft and delivered as installed equipment on new aircraft.

4. Significant Interfaces. The IMDS receives information from the GPWS Air Data Computer, AFCS, GPS, and the BMP. Additionally, the GDS software resides on an optimized NALCOMIS ground station. The IMDS technology is generic and can be applied to other platforms.

5. New Features, Configurations, or Material. Not Applicable (NA)

H. CONCEPTS

1. Operational Concept. The IMDS OBS will be operated by Marine Corps CH-53E Rotary Wing Pilots with Military Occupational Specialty (MOS) 7566, Navy SH-60B Rotary Wing Pilots with 1311 or 1312 Designator Codes, Marine Corps CH-53E Enlisted Aircrew personnel with MOS 6173, and Navy SH-60B Aviation Warfare Systems Operators (AW) with Navy Enlisted Classification (NEC) 7873.

2. Maintenance Concept. The IMDS maintenance concept is based on organizational and depot level maintenance in accordance with the guidelines established in the Naval Aviation Maintenance Program (NAMP), Office of the Chief of Naval Aviation Instruction (OPNAVINST) 4790.2H.

a. Organizational. The IMDS will be maintained at the organizational level by Marine Corps CH-53E Communication/Electrical System Technicians with MOS 6323, Marine Corps CH-53E Airframe Mechanics with MOS 6153, Marine Corps CH-53E Aircraft Mechanics with MOS 6113, Navy Aviation Electronics Technicians (AT) with NECs 8376 or 8876, and Navy Aviation Electrician's Mates (AE), Navy Aviation Structural Mechanics (AM) and Navy Aviation Machinist's Mates (AD) with NECs 8378 or 8878.

(1) Preventive Maintenance. Preventive maintenance will consist of performing a daily confidence test and scheduled maintenance tasks at prescribed calendar or operating time intervals.

(2) Corrective Maintenance. Corrective maintenance is built around the self-test program that automatically indicates the operational condition of the system. The self-test program fault-isolates to a defective Line Replaceable Unit (LRU). When the fault is verified, the defective LRU is removed and replaced.

b. Intermediate. NA

c. Depot. The contractor, B.F. Goodrich Aerospace, will perform repair, calibration, and overhaul of all IMDS components.

d. Interim Maintenance. B.F. Goodrich Aerospace will perform interim maintenance support for the IMDS until full Navy organic support is achieved. The Navy Support Date is planned for first quarter FY06.

e. Life Cycle Maintenance Plan. NA

3. Manning Concept. Current manpower requirements identified in Navy Activity Manpower Documents and Marine Corps Tables of Organization are projected to be sufficient to support IMDS without change. However, a change in course length or training throughput has the potential to increase manpower or instructor requirements, and will continue to be under evaluation as courses are modified.

4. Training Concept. The IMDS training program will consist of initial and follow-on training for operators and maintenance personnel. IMDS follow-on maintenance training will be provided through existing courses and tracks modified with IMDS data.

a. Initial Training. Initial training will be conducted in four phases. Phase one initial training for DT personnel has been completed. Phase two initial training will be for OT personnel. Phase three initial training will be for initial cadre personnel including Fleet Readiness Squadron (FRS), Naval Aviation Maintenance Marine Unit (NAMTRA MARUNIT), Naval Aviation Maintenance Training Group Detachment (NAMTRAGRU DET), and Naval Air Maintenance Training Unit (NAMTRAU) Instructors. Phase four initial training will be for personnel assigned to squadrons receiving the IMDS and will be conducted at each squadron as part of fleet introduction. Initial training is divided into four modules as follows:

Title **H-53E/H-60 IMDS Familiarization Module One**

Description..... Module One will provide a basic overview of the IMDS System. This module includes instructions on the capabilities of the system, the OBS, and the GBS. The instructional setting will be group-paced and Interactive Multimedia Instruction without testing.

Locations ° HMT 302, Marine Corps Air Station (MCAS) New River
 ° HSL-40, Naval Station (NS) Mayport
 ° HSL-41, Naval Air Station (NAS) North Island
 ° Fleet Squadrons

Length..... 1 day

RFT dates..... ° September 2002 for CH-53E OT personnel (completed)
 ° 30 days prior to OT for SH-60B OT personnel
 ° February 2005 for CH-53E cadre personnel
 ° 45 days after OT for SH-60B cadre personnel
 ° Estimated early 2005 for CH-53E squadron personnel
 ° 30 days prior to aircraft installation for SH-60B squadron personnel

TTE/TD..... One OBS and one GBS will be used at each training site as Technical Training Equipment (TTE). Training Devices (TD) are NA.

Prerequisites..... OT Team Member, FRS Instructor, NAMTRA MARUNIT Instructor, NAMTRAU Instructor, NATEC personnel, or aircrew or maintenance personnel assigned to a squadron during IMDS fleet introduction.

Title **H-53E/H-60 IMDS Familiarization Module Two**

Description..... Module Two will provide training to aircrew and designated maintenance personnel to initialize the system, operate selected functions during flight, and perform post-flight functions of data download and debrief. This module includes instruction on pre-flight and post-flight procedures and on selected in-flight functions. The instructional setting will be group-paced and Interactive Multimedia Instruction, with “open-book” testing.

Locations ° HMT 302, MCAS New River
 ° HSL-40, NS Mayport
 ° HSL-41, NAS North Island
 ° Fleet Squadrons

Length..... 1 day

RFT dates..... ° September 2002 for CH-53E OT personnel (completed)
 ° 30 days prior to OT for SH-60B OT personnel
 ° February 2005 for CH-53E cadre personnel
 ° 45 days after OT for SH-60B cadre personnel
 ° Estimated early 2005 for CH-53E squadron personnel
 ° 30 days prior to aircraft installation for SH-60B squadron personnel

TTE/TD..... One OBS and one GBS will be used at each training site as TTE. TD is NA.

Prerequisites..... OT Team Member, FRS Instructor, NAMTRA MARUNIT Instructor, NAMTRAU Instructor, or aircrew or Quality Assurance personnel assigned to a squadron during IMDS fleet introduction.

Title H-53E/H-60 IMDS Familiarization Module Three

Description..... Module Three will provide training to designated aircrew personnel and Quality Assurance personnel to perform all of the OBS functions, to access the GBS, to identify and print out required reports, to assign relevant maintenance procedures, and to carry out all associated administrative procedures. This module consists of instruction covering the full onboard system and the operation of the GBS and associated maintenance functions. The instructional setting will be group-paced and Interactive Multimedia Instruction, with “open-book” testing.

Locations ° HMT 302, MCAS New River
 ° HSL-40, NS Mayport
 ° HSL-41, NAS North Island
 ° Fleet Squadrons

Length..... 1 day

RFT dates..... ° September 2002 for CH-53E OT personnel (completed)
 ° 30 days prior to OT for SH-60B OT personnel
 ° February 2005 for CH-53E cadre personnel
 ° 45 days after OT for SH-60B cadre personnel
 ° Estimated early 2005 for CH-53E squadron personnel
 ° 30 days prior to aircraft installation for SH-60B squadron personnel

TTE/TD..... One OBS and one GBS will be used at each training site as TTE. TD is NA.

Prerequisites..... OT Team Member, FRS Instructor, NAMTRA MARUNIT Instructor, NAMTRAU Instructor, NATEC personnel, or aircrew or maintenance personnel assigned to a squadron during IMDS fleet introduction.

Title H-53E/H-60 IMDS Familiarization Module Four

Description..... Module Four will provide training to maintenance personnel to support the IMDS onboard system. This module consists of eight hours of instruction covering the full OBS and the operation of the GBS and associated maintenance functions. The instructional setting will be group-paced and Interactive Multimedia Instruction.

Locations ° HMT 302, MCAS New River
° HSL-40, NS Mayport
° HSL-41, NAS North Island

Length..... 1 day

RFT dates..... ° September 2002 for CH-53E OT personnel (completed)
° 30 days prior to OT for SH-60B OT personnel
° February 2005 for CH-53E cadre personnel
° 45 days after OT for SH-60B cadre personnel
° Estimated early 2005 for CH-53E squadron personnel
° 30 days prior to aircraft installation for SH-60B squadron personnel

TTE/TD..... One OBS and one GBS will be used at each training site as Technical Training Equipment. TD is NA.

Prerequisites..... OT Team Member, FRS Instructor, NAMTRA MARUNIT Instructor, NAMTRAU Instructor, or aircrew and maintenance personnel assigned to a squadron during IMDS fleet introduction.

b. Follow-on Training

(1) Operator Training

Title CH-53 Basic Pilot Training
CIN MC-1 (See Note)
Model Manager.... HMT 302
Description..... This course provides training to the Fleet Replacement Pilot, including:
 ° CH-53 and Weapons Systems Employment
 ° Flight Training Crew Tactics and Safety
 ° Communications and Navigation
 ° Naval Air Training and Operational Procedure Standardization (NATOPS)
Upon completion, the student will be able to perform as a CH-53 Pilot in a squadron environment.
Location HMT 302, MCAS New River
Length..... 131 days
RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005.
Skill identifier ° MOS 7566
TTE/TD..... ° Device 2F121, Aircrew Procedures Trainer (APT)
 ° Device 2F174, Weapons System Trainer (WST)
Prerequisite ° Q-2A-0001, Primary Flight Training
 ° Q-2A-0010, Joint T-34C Intermediate Flight Training
 ° Q-2A-0013, V-4 Undergraduate Flight Training-Helo
 ° Q-2A-0015, Undergraduate Helicopter Pilot Training
 ° Designated Marine Helicopter Pilot
 ° Security Clearance - Secret

Note: The CH-53 Basic Pilot Training course is not listed in either the OPNAV Aviation Training Management System (OATMS) or the Catalog of Navy Training Courses (CANTRAC).

Title **CH-53 Transition Pilot Training**

CIN MC-2 (See note)

Model Manager.... HMT 302

Description..... This course provides training to the Transition Fleet Replacement Pilot, including:

- ° CH-53 and Weapon Systems Employment
- ° Flight Training Crew Tactics and Safety
- ° Communications and Navigation
- ° NATOPS

Upon completion, the student will be able to perform as a CH-53 Pilot in a squadron environment.

Location HMT 302, MCAS New River

Length..... 96 days

RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005.

Skill identifier ° MOS 7564
° MOS 7566

TTE/TD..... ° Device 2F121, APT
° Device 2F174, WST

Prerequisite ° Q-2A-0001, Primary Flight Training
° Q-2A-0010, Joint T-34C Intermediate Flight Training
° Q-2A-0013, V-4 Undergraduate Flight Training-Helo
° Q-2A-0015, Undergraduate Helicopter Pilot Training
° Designated Marine Helicopter Pilot
° CH-53 Basic Pilot Training
° Security Clearance - Secret

Note: The CH-53 Transition Pilot Training course is not listed in either the OATMS or the CANTRAC.

Title **CH-53 Conversion Pilot Training**

CIN MC-3 (See Note)

Model Manager.... HMT 302

Description..... This course provides training to the Conversion Fleet Replacement Pilot, including:

- ° CH-53 and Weapon Systems Employment
- ° Flight Training Crew Tactics and Safety
- ° Communications and Navigation
- ° NATOPS

Upon completion, the student will be able to perform as a CH-53 Pilot in a squadron environment.

Location HMT 302, MCAS New River

Length..... 68 days

RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005..

Skill identifier ° MOS 7564
° MOS 7566

TTE/TD..... ° Device 2F121, APT
° Device 2F174, WST

Prerequisite ° Q-2A-0001, Primary Flight Training
° Q-2A-0010, Joint T-34C Intermediate Flight Training
° Q-2A-0013, V-4 Undergraduate Flight Training - Helo
° Q-2A-0015, Undergraduate Helicopter Pilot Training
° Designated Marine Helicopter Pilot
° CH-53 Basic Pilot Training
° Security Clearance - Secret

Note: The CH-53 Conversion Pilot Training course is not listed in either the OATMS or the CANTRAC.

Title **CH-53 Refresher Pilot Training**

CIN MC-4 (See Note)

Model Manager.... HMT 302

Description..... This course provides refresher training to the Fleet Replacement Pilot, including:

- Weapon Systems Employment
- Flight Training Crew Tactics and Safety
- Communications and Navigation
- NATOPS

Upon completion, the student will be able to perform as a CH-53 Pilot in a squadron environment.

Location HMT 302, MCAS New River

Length..... 47 days

RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005.

Skill identifier ◦ MOS 7564
◦ MOS 7566

TTE/TD..... ◦ Device 2F121, APT
◦ Device 2F174, WST

Prerequisite ◦ Q-2A-0001, Primary Flight Training
◦ Q-2A-0010, Joint T-34C Intermediate Flight Training
◦ Q-2A-0013, V-4 Undergraduate Flight Training-Helo
◦ Q-2A-0015, Undergraduate Helicopter Pilot Training
◦ Designated Marine Helicopter Pilot
◦ CH-53 Basic Pilot Training
◦ Security Clearance - Secret

Note: The CH-53 Refresher Pilot Training course is not listed in either the OATMS or the CANTRAC.

Title **CH-53E Crew Chief Training Syllabus**
CIN M-601-2722
Model Manager.... HMT 302
Description..... This course provides training to the Aircraft Crew Chief, including:
 ° Duties of the CH-53E Aircraft Crew Chief
 ° Helicopter Maintenance
 ° Flight Line Procedures
 ° Aircraft Taxi and Servicing
 ° Pre-flight and Post-flight Inspections
 ° NATOPS
 Upon completion, the student will be able to perform as a CH-53E Crew Chief in a squadron environment under limited supervision.
Location HMT 302, MCAS New River
Length..... 234 days
RFT date Currently available. Estimated Ready For Training (RFT) date with IMDS is early 2005..
Skill identifier MOS 6173
TTE/TD..... ° Device 2F121, APT
 ° Device 2F174, WST
Prerequisite ° C-602-9456, CH-53 Helicopter Mechanic Integrated O-Level Maintenance
 ° E-2D-0039, Survival, Evasion, Resistance, and Escape
 ° Q-050-1500, Naval Aircrewman Candidate School

Title **SH-60B Category I Fleet Replacement Pilot**
CIN D/E-2C-2501
Model Manager.... HSL-40
Description..... This course provides training to the first tour SH-60B Replacement Pilot, including:
 ° Flight Training
 ° Crew Tactics and Safety
 ° Communications and Navigation
 ° NATOPS
 Upon completion, the student will be able to perform as an SH-60B Pilot in a squadron environment.

Locations ° HSL-40 NS Mayport
 ° HSL-41 NAS North Island

Length..... 150 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier 1311

TTE/TD ° Operational Flight Trainer (OFT) 2F135
 ° Weapons Tactics Trainer (WTT) 14B51

Prerequisites..... ° E-2D-0039, Survival, Evasion, Resistance, and Escape
 ° E-7C-0039, Basic Officer Leadership Course
 ° B-9E-1226, Naval Aviation Water Survival Program R-3
 ° B-322-0042, Refresher Aerospace Physiology Helicopter Training
 ° Security Clearance - Secret

Title SH-60B Category II Fleet Replacement Pilot

CIN D/E-2C-2502

Model Manager.... HSL-40

Description..... This course provides training to the second tour SH-60B Pilot, including:
 ° Flight Training
 ° Armament Control
 ° Crew Tactics and Safety
 ° Communications and Navigation
 ° NATOPS
 Upon completion, the student will be able to perform as an SH-60B Pilot in a squadron environment.

Locations ° HSL-40 NS Mayport
 ° HSL-41 NAS North Island

Length..... 110 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier 1311

TTE/TD..... ° OFT 2F135
 ° WTT 14B51

Prerequisites..... ° D/E-2C-2501, SH-60B Category I Fleet Replacement Pilot
 ° E-2D-0039, Survival, Evasion, Resistance, and Escape
 ° E-7C-0039, Basic Officer Leadership Course
 ° B-9E-1226, Naval Aviation Water Survival Program R-3
 ° B-322-0042, Refresher Aerospace Physiology Helicopter Training
 ° Security Clearance - Secret

Title SH-60B Category III Fleet Replacement Pilot

CIN D/E-2C-2503

Model Manager.... HSL-40

Description..... This course provides training to the SH-60B Pilot, including:

- ° Advanced Flight Training
- ° Armament System Capabilities
- ° Advanced Crew Tactics and Safety
- ° Communications and Navigation
- ° NATOPS

Upon completion, the student will be able to perform as a senior SH-60B Pilot in a squadron environment.

Locations ° HSL-40 NS Mayport
 ° HSL-41 NAS North Island

Length..... 75 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier 1311, 1312

TTE/TD..... ° OFT 2F135
 ° WTT 14B51

Prerequisites..... ° D/E- 2C-2501, SH-60B Category I Fleet Replacement Pilot
 ° E-2D-0039, Survival, Evasion, Resistance, and Escape
 ° E-7C-0039, Basic Officer Leadership Course
 ° B-9E-1226, Naval Aviation Water Survival Program R-3
 ° B-322-0042, Refresher Aerospace Physiology Helicopter Training
 ° Security Clearance - Secret

Title **SH-60B Category IV Fleet Replacement Pilot**

CIN D/E-2C-2504

Model Manager.... HSL-40

Description..... This course provides training to the SH-60B Senior Pilot, including:

- Armament System Capabilities
- Flight Training
- Advanced Crew Tactics and Safety
- Communications and Navigation
- NATOPS

Upon completion, the student will be able to perform as a senior SH-60B Pilot in a squadron environment.

Locations ◦ HSL-40 NS Mayport
◦ HSL-41 NAS North Island

Length..... 85 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier 1311, 1312

TTE/TD..... ◦ OFT 2F135
◦ WTT 14B51

Prerequisites..... ◦ D/E-2C-2501, SH-60B Category I Fleet Replacement Pilot
◦ E-2D-0039, Survival, Evasion, Resistance, and Escape
◦ E-7C-0039, Basic Officer Leadership Course
◦ B-9E-1226, Naval Aviation Water Survival Program R-3
◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training
◦ Security Clearance - Secret

Title **SH-60B Fleet Replacement Aircrew Instructor Under Training**

CIN D/E-050-2505

Model Manager.... HSL-40

Description..... This course provides training to the SH-60B Replacement Aircrewman, including:

- SH-60B Systems Advanced Theory and Operation
- Normal and Emergency Procedures
- Advanced Crew Tactics and Safety
- Survival Equipment
- NATOPS

Upon completion, the student will be able to perform as an Instructor for SH-60B Aircrewmen in a training squadron environment under limited supervision.

Locations ◦ HSL-40 NS Mayport
◦ HSL-41 NAS North Island

Length..... 21 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AW 7873

TTE/TD..... OFT 2F141

Prerequisites..... ◦ E-2D-0039, Survival Evasion Resistance, and Escape
◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training
◦ B-9E-1226, Naval Aviation Water Survival Program R-3
◦ J-495-0413, Shipboard Aircraft Fire Fighting
◦ D-050-2510, SH-60B Cat 1 Fleet Replacement Aircrewman (FRAC) Pipeline

Title **SH-60B Category I Fleet Replacement Aircrewman (FRAC) Pipeline**

CIN D/E-050-2510

Model Manager.... HSL-40

Description..... This course provides training to the first tour SH-60B Replacement Aircrewman, including:

- SH-60B Systems Theory and Operation
- Normal and Emergency Procedures
- Crew Tactics and Safety
- Survival Equipment
- NATOPS

Upon completion, the student will be able to perform as a SH-60B Aircrewman in a squadron environment under limited supervision.

Locations ◦ HSL-40 NS Mayport
◦ HSL-41 NAS North Island

Length..... 197 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AW 7873

TTE/TD..... OFT 2F141

Prerequisites..... ◦ E-2D-0039, Survival Evasion Resistance, and Escape
◦ B-9E-1226, Naval Aviation Water Survival Program R-3
◦ C-210-2010, Aviation Warfare Systems Operator Class A1
◦ C-210-2011, Airborne Acoustic Mission
◦ Q-050-0600, Aviation Rescue Swimmer School CAT 1
◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training
◦ Q-050-1500, Naval Aircrewman Candidate School
◦ J-495-0413, Shipboard Aircraft Fire Fighting

Title **SH-60B Category III Fleet Replacement Aircrewman (FRAC) Pipeline**

CIN D/E-050-2511

Model Manager.... HSL-40

Description..... This course provides training to the senior SH-60B Replacement Aircrewman, including:

- SH-60B Systems Theory and Operation
- Normal and Emergency Procedures
- Advanced Crew Tactics and Safety
- Survival Equipment
- NATOPS

Upon completion, the student will be able to perform as a senior SH-60B Aircrewman in a squadron environment under limited supervision.

Locations ◦ HSL-40 NS Mayport
◦ HSL-41 NAS North Island

Length..... 71 days

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AW 7873

TTE/TD..... OFT 2F141

Prerequisites..... ◦ E-2D-0039, Survival Evasion Resistance, and Escape
◦ B-9E-1226, Naval Aviation Water Survival Program R-3
◦ Security Clearance - Secret
◦ D/E-050-2510, SH-60B Category I Fleet Replacement Aircrewman Training
◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training

(2) Maintenance Training

| | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title | CH-53E Communications/Electrical System O-Level Maintenance |
| CIN | M-102-2731 |
| Model Manager.... | NAMTRA MARUNIT New River |
| Description..... | This course provides training to the newly assigned technician, including: <ul style="list-style-type: none">° Communications Systems, Navigation, Identification° Electrical Theory of Operation and Operational Procedures° Component Location and Characteristics° Automatic Flight Control Systems° Troubleshooting Procedures° Safety Upon completion, the student will be able to perform organization level maintenance on the CH-53E communications and electrical systems in a squadron environment under limited supervision. |
| Location | NAMTRA MARUNIT, New River |
| Length..... | 107 days (An increase in course length is anticipated and is under evaluation) |
| RFT date | Currently available. Estimated RFT date with IMDS is early 2005. |
| Skill identifier | MOS 6323 |
| TTE/TD..... | ° CH-53E Composite Maintenance Trainer (CMT) ° CH-53E AFCS Maintenance Trainer ° CH-53E Communications, Navigation, and Identification (CNI) Trainer |
| Prerequisite | C-100-2018, Avionics Technician O-Level Class A1 |

Title **CH-53 Power Plant and Related Systems Maintenance**
CIN M-601-2720
Model Manager.... NAMTRA MARUNIT New River
Description..... This course provides training to the Mechanical Technician, including:
 ° Basic Helicopter and General Safety
 ° Troubleshooting
 ° Publications
 ° Power Plants, Auxiliary Power Plant, and Fuel Systems
 ° Transmission and Rotor Systems
 ° Flight Control System
 ° Blade/Pylon Fold, and Cargo Handling Systems
 Upon completion, the student will be able to perform CH-53E power plants and related systems organizational level maintenance in a squadron environment under limited supervision.
Location NAMTRA MARUNIT, New River
Length..... 92 days (An increase in course length is anticipated and is under evaluation)
RFT date Currently available. Estimated RFT date with IMDS is early 2005.
Skill identifier MOS 6113
TTE/TD ° CH-53E CMT
 ° CH-53E Fuel Systems Trainer
 ° Auxiliary Power Plant Trainer
 ° Rotor Head Trainer
Prerequisite C-602-9456, CH-53 Helicopter Mechanic Integrated O-Level Maintenance

Title **CH-53 Helicopter Airframe Mechanic**

CIN M-602-2781

Model Manager.... NAMTRA MARUNIT New River

Description..... This course provides training to the Airframes Mechanic, including:

- ° Theory of Operation
- ° Troubleshooting
- ° Basis for Diagnosis
- ° Organizational Level Maintenance Procedures
- ° Safety

Upon completion, the student will be able to perform organizational level maintenance on the CH-53 structures, hydraulics, and related systems in a squadron environment under limited supervision.

Location NAMTRA MARUNIT, New River

Length..... 100 days (An increase in course length is anticipated and is under evaluation)

RFT date Currently available. Estimated RFT date with IMDS is early 2005.

Skill identifier MOS 6153

TTE/TD..... ° CH-53E CMT
° Rotor Head Trainer

Prerequisite ° C-603-0175, Aviation Structural Mechanic (Structures and Hydraulic) Common Core Class A1
° C-603-0176, Aviation Structural Mechanic (Structures and Hydraulic) O-Level Strand Class A1

Title **SH-60B LAMPS MK III Weapon Systems Technician (Initial) Organizational Maintenance**

CIN D/E-102-0820

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the first tour Aviation Electronics Technician, including:

- Familiarization and Safety Precautions
- Publications
- Component Location
- System Characteristics
- Basic Testing, Servicing, and Troubleshooting
- NAMP

Upon completion, the student will be able to safely perform organizational maintenance on the SH-60B avionics systems in a squadron environment under close supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island

Length..... 78 days currently (82 days with IMDS included)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AT 8876

TTE/TD..... Avionics Maintenance Trainer (AMT)

Prerequisite ◦ C-100-2020, Avionics Common Core Class A1
◦ C-100-2018, Avionics Technician Organizational Level Class A1

Title **SH-60B LAMPS MK III Weapon Systems Technician (Career) Organizational Maintenance**

CIN D/E-102-0825

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the career Aviation Electronics Technician, including:

- Systems Analysis and Configuration
- Systems Operation
- Advanced Troubleshooting Techniques
- Safety Precautions
- Light Airborne Multi-Purpose System (LAMPS) Helicopter and Ship Integration

Upon completion, the student will be able to perform organizational maintenance on the SH-60B avionics systems in a squadron environment under limited supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island

Length..... 16 days currently (17 days with incorporation of IMDS principals of operation, lab, and maintenance)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AT 8376

TTE/TD..... AMT

Prerequisite ◦ C-100-2020, Avionics Common Core Class A1
◦ C-100-2018, Avionics Technician Organizational Level Class A1
◦ D/E-102-0820, SH-60B LAMPS MK III Weapon Systems Technician (Initial) Organizational Maintenance

| | |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title | H-60 Power Plants and Related Systems (Initial) Organizational Maintenance |
| CIN | D/E-602-0810 |
| Model Manager.... | MTU 1022 NAMTRAU North Island |
| Description..... | This course provides training to the first tour Aviation Machinist's Mate, including: <ul style="list-style-type: none"> ° H-60 Introduction ° Component Location and Purpose ° Publications ° Systems Familiarization and Description ° Theory of Operation ° Safety Procedures ° Troubleshooting ° Introduction to the NAMP <p>Upon completion, the student will be able to safely perform organizational maintenance on the SH-60B power plants and related systems in a squadron environment under close supervision.</p> |
| Locations | ° MTU 1066 NAMTRAGRU DET Mayport ° MTU 1022 NAMTRAU North Island |
| Length..... | 38 days (Course length will be affected by the addition of IMDS, currently under evaluation) |
| RFT date | Currently available. Estimated RFT date with IMDS is late 2005. |
| Skill identifier | AD 8878 |
| TTE/TD..... | ° Composite Maintenance Trainer ° Landing Gear/Wheel Brake Trainer ° Quick Engine Change (QEC) Maintenance Trainer ° Blade Inspection Maintenance (BIM) Trainer ° SH-60B Aircraft |
| Prerequisite | ° C-601-2011, Aviation Machinist's Mate Common Core Class A1 ° C-601-2012, Aviation Machinist's Mate Fundamentals Strand Class A1 |

Title **H-60 Power Plants and Related Systems (Career) Organizational Maintenance**

CIN D/E-601-0813

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the career Aviation Machinist's Mate, including:

- Systems Publications and Configuration
- Systems Operation, Testing, and Repair Procedures
- Advanced Troubleshooting Techniques
- Vibration Analysis and Borescoping
- Safety Precautions

Upon completion, the student will be able to perform organizational maintenance on the SH-60B power plants and related systems in a squadron environment under limited supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island

Length..... 16 days (Course length will be affected by the addition of IMDS, currently under evaluation)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AD 8378

TTE/TD..... ◦ Composite Maintenance Trainer
◦ Landing Gear/Wheel Brake Trainer
◦ QEC Maintenance Trainer
◦ BIM Trainer
◦ SH-60B Aircraft

Prerequisite ◦ C-601-2011, Aviation Machinist's Mate Common Core Class A1
◦ C-601-2012, Aviation Machinist's Mate Helicopter Fundamentals Strand Class A1
◦ D/E-602-0810, H-60 Power Plants and Related Systems (Initial) Organizational Maintenance

Title **H-60 Electrical/Instruments and Automatic Flight Control Systems (Initial) Organizational Maintenance**

CIN D/E-602-0855

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the first tour Aviation Electrician's Mate, including:

- Component Location and Purpose
- Testing and Troubleshooting Procedures
- Publications
- Systems Familiarization and Description
- Theory of Operation
- Safety Procedures
- Introduction to the NAMP

Upon completion, the student will be able to safely perform organizational maintenance on the SH-60B electrical/instruments and AFCS in a squadron environment under close supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island
◦ MTU 1005 NAMTRAU Jacksonville

Length..... 86 days (Course length may change with additional IMDS training being added)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AE 8878

TTE/TD..... ◦ AMT
◦ AFCS Maintenance Trainer
◦ Composite Maintenance Trainer
◦ SH-60B Aircraft

Prerequisite ◦ C100-2020, Avionics Common Core Class A1
◦ C-602-2039, Aviation Electrician's Mate Strand Class A1

Title **H-60 Electrical/Instruments and Automatic Flight Control System (Career) Organizational Maintenance**

CIN D/E-602-0854

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the career Aviation Electrician's Mate, including:

- Systems Publications and Configuration
- Systems Operation, Testing, and Repair Procedures
- Theoretical Troubleshooting Techniques
- Flight Control and Fuel Systems
- Safety Precautions

Upon completion, the student will be able to perform organizational maintenance on the SH-60B electrical/ instrument and AFCS in a squadron environment under limited supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island
◦ MTU 1005 NAMTRAU Jacksonville

Length..... 16 days (Course length may change with additional IMDS training being added)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AE 8378

TTE/TD..... ◦ AMT
◦ AFCS Maintenance Trainer
◦ Composite Maintenance Trainer
◦ SH-60B Aircraft

Prerequisite ◦ C100-2020, Avionics Common Core Class A1
◦ C-602-2039, Aviation Electrician's Mate Strand Class A1
◦ D/E-602-0855, H-60 Electrical/Instruments and Automatic Flight Control Systems (Initial) Organizational Maintenance

Title **H-60 Airframes and Related Systems (Initial)
Organizational Maintenance**

CIN D/E-602-0883

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the first tour Aviation Structural Mechanic, including:

- Component Location and Purpose
- Publications
- Systems Familiarization, Description, and Theory of Operation
- Troubleshooting and Safety Procedures
- Introduction to the NAMP

Upon completion, the student will be able to safely perform organizational maintenance on the SH-60B airframes and related systems in a squadron environment under close supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island
◦ MTU 1005 NAMTRAU Jacksonville

Length..... 36 days (Course length may change with additional IMDS training being added)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AM 8878

TTE/TD..... ◦ Composite Maintenance Trainer
◦ Landing Gear Flotation Systems Maintenance Trainer
◦ Recovery Assist Securing and Traversing (RAST)/Tail Hoist Systems Maintenance Trainer
◦ SH-60B Aircraft

Prerequisite C-603-0176, Aviation Structural Mechanic (Structures and Hydraulics) Class A1

Title **H-60 Airframes and Related Systems (Career)
Organizational Maintenance**

CIN D/E-602-0882

Model Manager.... MTU 1022 NAMTRAU North Island

Description..... This course provides training to the career Aviation Structural Mechanic, including:

- Systems Publications and Configuration
- Systems Operation, Testing, and Repair Procedures
- Theoretical Troubleshooting Techniques
- Vibration Analysis and Landing Gear
- Safety Precautions

Upon completion, the student will be able to perform organizational maintenance on the SH-60B airframes and related systems in a squadron environment under limited supervision.

Locations ◦ MTU 1066 NAMTRAGRU DET Mayport
◦ MTU 1022 NAMTRAU North Island
◦ MTU 1005 NAMTRAU Jacksonville

Length..... 15 days (Course length may change with additional IMDS training being added)

RFT date Currently available. Estimated RFT date with IMDS is late 2005.

Skill identifier AM 8378

TTE/TD..... ◦ Composite Maintenance Trainer
◦ Landing Gear Flotation Systems Maintenance Trainer
◦ RAST Tail Hoist Systems Maintenance Trainer
◦ SH-60B Aircraft

Prerequisite ◦ C-603-0175, Aviation Structural Mechanic (Structures and Hydraulics) Class A1
◦ D/E-602-0883, H-60 Airframes and Related Systems (Initial) Organizational Maintenance

c. Student Profiles

| SKILL IDENTIFIER | PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1311, 1312 | <ul style="list-style-type: none"> ◦ E-2D-0039, Survival, Evasion, Resistance, and Escape ◦ E-7C-0039, Basic Officer Leadership Course ◦ B-9E-1226, Naval Aviation Water Survival Program R-3 ◦ Security Clearance - Secret |
| MOS 7566 | <ul style="list-style-type: none"> ◦ Q-2A-0001, Primary Flight Training ◦ Q-2A-0010, Joint T-34C Intermediate Flight Training ◦ Q-2A-0013, V-4 Undergraduate Flight Training-Helo |
| AD 8378 | <ul style="list-style-type: none"> ◦ C-601-2011, Aviation Machinist's Mate Common Core Class A1 ◦ C-601-2012, Aviation Machinist's Mate Helicopter Fundamentals Strand Class A1 ◦ D/E-601-0810, H-60 Power Plants and Related Systems (Initial) Organizational Maintenance |
| AD 8878 | <ul style="list-style-type: none"> ◦ C-601-2011, Aviation Machinist's Mate Common Core Class A1 ◦ C-601-2012, Aviation Machinist's Mate Helicopter Fundamentals Strand Class A1 |
| AE 8378 | <ul style="list-style-type: none"> ◦ C-100-2020, Avionics Common Core Class A1 ◦ C-602-2039, Aviation Electrician's Mate Strand Class A1 ◦ D/E-602-0855, H-60 Electrical/Instrument and Automatic Flight Control System (Initial) Organizational Maintenance |
| AE 8878 | <ul style="list-style-type: none"> ◦ C-100-2020, Avionics Common Core Class A1 ◦ C-602-2039, Aviation Electrician's Mate Strand Class A1 |
| AM 8378 | <ul style="list-style-type: none"> ◦ C-603-0175, Aviation Structural Mechanic (Structures and Hydraulics) Class A1 ◦ D/E-602-0883, H-60 Airframes and Related Systems (Initial) Organizational Maintenance |
| AM 8878 | <ul style="list-style-type: none"> ◦ C-603-0175, Aviation Structural Mechanic (Structures and Hydraulics) Class A1 |
| AT 8376 | <ul style="list-style-type: none"> ◦ C-100-2020, Avionics Common Core Class A1 ◦ C-100-2018, Avionics Technician Organizational Level Class A1 ◦ D/E-102-0820, SH-60B LAMPS MK III System Organizational (Initial) Maintenance Technician |

| SKILL IDENTIFIER | PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AT 8876 | <ul style="list-style-type: none"> ◦ C-100-2020, Avionics Common Core Class A1 ◦ C-100-2018, Avionics Technician Organizational Level Class A1 |
| AW 7873 | <ul style="list-style-type: none"> ◦ E-2D-0039, Survival Evasion Resistance, and Escape ◦ B-322-0042, Refresher Aerospace Physiology Helicopter Training ◦ B-9E-1226, Naval Aviation Water Survival Program R-3 ◦ C-495-0413, Shipboard Aircraft Fire Fighting ◦ Q-050-0600, Aviation Rescue Swimmer School CAT 1 ◦ Q-050-1500, Naval Aircrewman Candidate School ◦ C-210-2010, Aviation Warfare Systems Operator Class A1 ◦ C-210-2011, Airborne Acoustic Mission ◦ Security Clearance – Secret |
| MOS 6113 | <ul style="list-style-type: none"> ◦ C-600-3601, Command Indoctrination ◦ C-602-9456, CH-53 Helicopter Mechanic Integrated O-Level Maintenance |
| MOS 6153 | <ul style="list-style-type: none"> ◦ C-600-3601, Command Indoctrination ◦ C-603-9444, CH-53 Airframes Integrated O-Level Maintenance ◦ C-603-0175, Aviation Structural Mechanic (Structures and Hydraulics) Common Core Class A1 |
| MOS 6173 | <ul style="list-style-type: none"> ◦ C-602-9456, CH-53 Helicopter Mechanic Integrated O-Level Maintenance ◦ Q-050-1500, Naval Aircrewman Candidate School ◦ E-2D-0039, Survival Evasion Resistance, and Escape |
| MOS 6323 | <ul style="list-style-type: none"> ◦ C-100-2018, Avionics Technician O-Level Class A1 ◦ C-102-9945, CH-53 A/D/E Communications/Navigation Systems Integrated O-Level Maintenance ◦ C-602-9451, CH-53E Dual Digital Automatic Flight Control System Integrated O-Level Maintenance ◦ C-602-9441, CH-53E Electrical Systems Integrated O-Level Maintenance ◦ C-600-3601, Command Indoctrination |

d. Training Pipelines. CH-53E and SH-60B Pilot and Aircrewman pipelines are established. Organizational level maintenance training tracks are established and will be revised to incorporate the IMDS. No additional training tracks are required.

I. ONBOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development. Current SH-60B organizational level maintenance courses are being integrated into Computer-Based Training with its basic elements of Computer-Managed Instruction, Computer-Aided Instruction, Interactive Courseware, and will be part of the Aviation Maintenance Training Continuum System (AMTCS).

a. Maintenance Training Improvement Program. Current planning is to adopt the Aviation Maintenance Training Continuum System (AMTCS) concepts to replace Maintenance Training Improvement Program (MTIP). AMTCS is scheduled to begin full implementation for fleet deployment in November 2003.

b. Aviation Maintenance Training Continuum System. AMTCS will provide career path training to the Sailor or Marine from their initial service entry to the end of their military career. AMTCS concepts will provide an integrated system that will satisfy the training and administrative requirements of both the individual and the organization. The benefits will be manifested in the increased effectiveness of the technicians and the increased efficiencies of the management of the training business process. Where appropriate, capitalizing on technological advances and integrating systems and processes can provide the right amount of training at the right time, thus meeting the CNO's mandated "just-in-time" training approach.

Technology investments enable the development of several state-of-the-art training and administrative tools: Interactive Multimedia Instruction (IMI) for the technicians in the Fleet in the form of Interactive Courseware (ICW) with Computer Managed Instruction (CMI) and Computer Aided Instruction (CAI) for the schoolhouse.

Included in the AMTCS development effort is the Aviation Maintenance Training Continuum System - Software Module, which provides testing [Test and Evaluation], recording [Electronic Certification Qualification Records], and a Feedback system. The core functionality of these AMTCS tools are based and designed around the actual maintenance-related tasks the technicians perform, and the tasks are stored and maintained in a Master Task List data bank. These tools are procured and fielded with appropriate Commercial-Off-The-Shelf (COTS)

Hardware, and software, i.e., Fleet Training Devices - Laptops, PCs, Electronic Classrooms, Learning Resource Centers (LRC), operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N789H), AMTCS concepts are to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS will serve as the standard training system for aviation maintenance training within the Navy and Marine Corps, and is planned to supersede the existing MTIP and Maintenance Training Management and Evaluation Program (MATMEP) programs.

2. Personnel Qualification Standards. NA

3. Other Onboard or In-Service Training Packages. Marine Corps onboard training is based on the current series of MCO P4790.12, Individual Training Standards System and MATMEP. This program is designed to meet Marine Corps, as well as Navy OPNAVINST 4790.2 series maintenance training requirements. It is a performance-based, standardized, level-progressive, documentable, training management and evaluation program. It identifies and prioritizes task inventories by MOS through a front-end analysis process that identifies task, skill, and knowledge requirements of each MOS. MATMEP is planned to be replaced by AMTCS.

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers

| CONTRACT NUMBER | MANUFACTURER | ADDRESS |
|------------------------|----------------------------|----------------------------------------|
| N00019-97-H-0152 | B.F. Goodrich Aerospace | 100 Panton Road Vergennes, VT 05491 |

2. Program Documentation. The following documentation supports the IMDS program:

- Mission Need Statement for the IMDS System, serial number M0-53-88-94, dated June 1994.
- CH-53E IMDS Project Test Plan, CH-53E-T-1-99, dated June 1999.
- SH-60B IMDS Project Test Plan, SH-60B-T-4-99, dated June 1999.
- Draft Acquisition Logistics Support Plan (ALSP) for the H-53 and H-60 IMDS, dated May 2000.
- Operational Requirements Document (ORD) for the IMDS, Serial Number 560-88-00, approved May 2000.
- Draft SH-60B IMDS User’s Logistics Support Summary (ULSS), dated November 2001.
- Draft CH-53E IMDS ULSS, dated August 2002.
- Acquisition Decision Memorandum, Program Executive Office Air (PEO(A)) letter, PEO(A)/001-02, dated January 2002.
- Test and Evaluation Master Plan (TEMP), Plan Number 1619, dated May 2002

3. Technical Data Plan. Technical publications such as maintenance manuals, Illustrated Parts Breakdowns (IPB), NATOPS manuals and checklists, and Maintenance Requirements Cards (MRC) will be produced, distributed, and supported in an Integrated Electronic Technical Manuals (IETM) format, including software and hardware support where required. The management of technical manuals is under the cognizance of the Naval Air

Technical Data and Engineering Service Command. B.F. Goodrich will supply all required technical documentation for support of the CH-53E and SH-60B IMDS program. Technical manual validation and verification was completed in August 2002 at MCAS New River, NAS North Island, and NAVAIR Patuxent River. Refer to element IV.B.3 for an overview of technical publications at training sites that require revision to include IMDS data.

4. Test Sets, Tools, and Test Equipment. A special tool kit is required to support maintenance of the CH-53E IMDS. The special tool kit consists of an optical scanner, jumper cables, test information cards, two allen wrenches, and eight templates. Two items have been identified to support maintenance of the IMDS installed in SH-60B Aircraft. These items are a high-speed blade balancing kit and a special tool kit consisting of templates, jumper cables, optical tracker, test information cards, and an allen wrench. Additional support equipment requirements may be identified as DT and OT continue.

5. Repair Parts. Repair parts to support IMDS maintenance will be under the control of the Navy Inventory Control Point Mechanicsburg, Pennsylvania. Prior to the Material Support Date (MSD), B.F. Goodrich will provide interim supply support by positioning a spares package at each operating site. The MSD is To Be Determined (TBD).

6. Human Systems Integration. NA

K. SCHEDULES

1. Installation and Delivery Schedules

a. CH-53E IMDS. Installation and delivery schedule information was extracted from the draft CH-53E IMDS ULSS, dated August 2002. Installation of the IMDS system aboard CH-53E Aircraft will be completed in two phases.

(1) Phase I. Five prototype IMDS were delivered to HMT 302 in Fiscal Year (FY) 01. Three of the IMDS were installed in HMT 302 aircraft in FY02. The two remaining IMDS will be used as spares for DT and OT. Additionally, 11 LRIP IMDS were delivered to HMT 302 in FY02.

| PHASE I CH-53E IMDS DELIVERY AND INSTALLATION SCHEDULE | | | | |
|-------------------------------------------------------------------|-------------|-------------|-------------|-------------|
| ACTIVITY | FY99 | FY00 | FY01 | FY02 |
| Patuxent River Prototype (Delivered/Installed) | 1/1 | 0/0 | 0/0 | 0/0 |
| HMT 302 Prototype (Delivered/Installed) | 0/0 | 0/0 | 5/0 | 0/3 |
| HMT 302 LRIP (Delivered/Installed) | 0/0 | 0/0 | 0/0 | 11/11 |

(2) Phase II. Phase II installation will be accomplished using production assets under IMDS Technical Directive Airframes Change-519. B.F. Goodrich has been contracted to conduct three IMDS installation for CH-53E utilizing a field modification team. Blue-Grass Army Depot Lexington, Kentucky, will be the installers for LRIP and production aircraft. Installers will utilize the government provided hangar space and will be responsible for the physical installation and integration of IMDS equipment into the aircraft. B.F. Goodrich will provide engineering and logistics support during installation.

| | PFY | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 | FY10 |
|------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Procured | 20 | 2 | 11 | 16 | 18 | 22 | 25 | 25 | 15 | 0 |
| Delivered | 0 | 10 | 12 | 11 | 16 | 18 | 22 | 25 | 25 | 15 |
| Installed | 0 | 10 | 12 | 11 | 16 | 18 | 22 | 25 | 25 | 15 |

b. SH-60B IMDS. Installation and delivery schedule information was extracted from the SH-60B IMDS ULSS, dated November 2001. Installation of the IMDS system aboard SH-60B Aircraft will be completed in two phases.

(1) Phase I. Five prototype IMDS were delivered to HSL-41 in FY01. Three of the IMDS were installed in HSL-41 aircraft in FY02. The two remaining IMDS will be used as spares for DT and OT. Additionally, 11 LRIP IMDS will be delivered to HSL-41 in FY02.

| PHASE I SH-60B IMDS DELIVERY AND INSTALLATION SCHEDULE | | | | |
|-------------------------------------------------------------------|-------------|-------------|-------------|-------------|
| ACTIVITY | FY99 | FY00 | FY01 | FY02 |
| Patuxent River Prototype (Delivered/Installed) | 1/1 | 0/0 | 0/0 | 0/0 |
| HSL-41 Prototype (Delivered/Installed) | 0/0 | 0/0 | 5/0 | 0/3 |
| HSL-41 LRIP (Delivered/Installed) | 0/0 | 0/0 | 0/0 | 11/11 |

(2) Phase II. Phase II installation will be accomplished using production assets under IMDS Technical Directive AFC/AVC-IMDS-001. B.F. Goodrich has been contracted to conduct IMDS installation for SH-60B utilizing a field modification team. B.F. Goodrich will utilize the government provided hangar space and will be responsible for the physical installation and integration of IMDS equipment into the aircraft. B.F. Goodrich will provide engineering and logistics support during installation.

| | PFY | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 | FY10 |
|------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Procured | 20 | 2 | 11 | 16 | 18 | 22 | 25 | 25 | 15 | 0 |
| Delivered | 0 | 10 | 12 | 11 | 16 | 18 | 22 | 25 | 25 | 15 |
| Installed | 0 | 10 | 12 | 11 | 16 | 18 | 22 | 25 | 25 | 15 |

2. Ready For Operational Use Schedule. The IMDS will be ready for operational use upon completion of installation.

3. Time Required to Install at Operational Sites. Installation will require three months.

4. Foreign Military Sales and Other Source Delivery Schedule. NA

5. Training Device and Technical Training Equipment Delivery Schedule. All TDs required to support CH-53E and SH-60B operator and maintainer training are in place. These TDs require IMDS modification; the installation schedule is not currently available. Refer to element IV.A.2 for an overview of the TDs that require modification. TTE required to support

IMDS training is identified in element IV.A.1. A delivery schedule for the IMDS TTE is not currently available.

L. GOVERNMENT-FURNISHED EQUIPMENT AND CONTRACTOR-FURNISHED EQUIPMENT TRAINING REQUIREMENTS. NA

M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

| DOCUMENT OR NTSP TITLE | DOCUMENT OR NTSP NUMBER | PDA CODE | STATUS |
|-------------------------------------------------|--------------------------------|----------------------|--------------------|
| ALSP for the IMDS | Not assigned | PMA261 PMA299 | Draft May 00 |
| ORD for IMDS | 560-88-00 | PMA261 AIR 3.1.2E | Approved May 00 |
| TEMP for the IMDS | 1619 | PMA261 PMA 299 | May 02 |
| Mission Needs Statement for the IMD system | 53-88-94 | CNO | Jun 94 |
| CH-53E IMDS Project Test Plan | CH-53E-T-1-99 | PMA261 | Jun 99 |
| SH-60B IMDS Project Test Plan | SH-60B-T-4-99 | PMA299 | Jun 99 |
| ULSS for the H-53 IMDS | Not Assigned | PMA261 | Draft Aug 02 |
| ULSS for the H-60 IMDS | Not assigned | PMA299 | Draft Nov 01 |
| Acquisition Decision Memorandum | PEO(A)/001-02 | PEO(A) | Jan 02 |
| NTSP for the CH-53E Aircraft | A-50-7604G/A | PMA261 | Approved Mar 01 |
| NTSP for the Light Airborne Multipurpose System | A-50-7702C/D | PMA299 | Draft Aug 01 |

PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the IMDS and, therefore, are not included in Part II of this NTSP:

II.A. Billet Requirements

- II.A.1.a. Operational and Fleet Support Activity Activation Schedule
- II.A.1.b. Billets Required for Operational and Fleet Support Activities
- II.A.1.c. Total Billets Required for Operational and Fleet Support Activities
- II.A.2.a. Operational and Fleet Support Activity Deactivation Schedule
- II.A.2.b. Billets to be deleted in Operational and Fleet Support Activities
- II.A.2.c. Total Billets to be deleted in Operational and Fleet Support Activities
- II.A.3. Training Activities Instructor and Support Billet Requirements
- II.A.4. Chargeable Student Billet Requirements
- II.A.5. Annual Incremental and Cumulative Billets

II.B. Personnel Requirements

- II.B.1. Annual Training Input Requirements

Note: The IMDS represents only a very small portion of the overall CH-53E and SH-60B operator and maintainer workload. The introduction of IMDS will have no effect on any existing Operational Activity Requirements, Fleet Support Activity Requirements, Billet Requirements, Training Activity Instructor Requirements, Chargeable Student Billet Requirements, or Annual Training Input Requirements. No Operational Activities or Fleet Support Activities will be deactivated or any billets added or deleted as a result of the IMDS. Current manpower requirements, identified in Navy Activity Manpower Documents and Marine Corps Tables of Organization, are projected to be sufficient to support IMDS without change. However, a significant change in course length or training throughput has the potential to increase manpower or instructor requirements and is under evaluation. Billet and Personnel Requirements are addressed in detail in the CH-53E NTSP, A-50-7604G/A, dated February 2001 and the Light Airborne Multi-Purpose System (SH-60B) NTSP, A-50-7702C/D, dated August 2001, and therefore, will not be duplicated in this NTSP.

PART III - TRAINING REQUIREMENTS

The following elements are not affected by the IMDS and, therefore, are not included in Part III of this NTSP:

III.A.2. Follow-on Training

III.A.2.a. Existing Courses

III.A.2.b. Planned Courses

III.A.2.c. Unique Courses

III.A.3. Existing Training Phased Out

Note: The IMDS represents only a very small portion of the overall CH-53E and SH-60B operator and maintainer training requirements. Initial training requirements associated with the IMDS are identified in element III.A.1 of this NTSP. No new follow-on courses will be developed to support the IMDS and no existing training courses will be phased out as a result of the IMDS introduction. Existing follow-on operator and maintainer training courses will have IMDS information incorporated, as applicable, with minor changes projected in course length. The only change to existing follow-on courses will be to individual lesson content. Follow-on operator and maintainer training requirements are addressed in detail in the CH-53E NTSP, A-50-7604G/A, dated February 2001 and the Light Airborne Multi-Purpose System (SH-60B) NTSP, A-50-7702C/D, dated August 2001, and therefore, will not be duplicated in this NTSP.

PART III - TRAINING REQUIREMENTS

III.A.1. INITIAL TRAINING

Note: Many factors concerning initial training are TBD. When this information becomes available, it will be included in updates to this NTSP.

COURSE TITLE: Initial Training for CH-53E OT Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: COMOPTEVFOR, HMT-302, NAWCAD Patuxent River

| LOCATION | UIC | DATE BEGIN | STUDENTS | | CIV | |
|----------------|-------|---------------|----------|------|-----|------------|
| | | | OFF | ENL | | |
| MCAS New River | 55203 | Sep 02 | 10 | 10 | 5 | INPUT |
| | | | 0.33 | 0.33 | | AOB |
| | | | 0 | 0 | | CHARGEABLE |

COURSE TITLE: Initial Training for SH-60B OT Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: COMOPTEVFOR, HSL-41, NAWCAD Patuxent River

| LOCATION | UIC | DATE BEGIN | STUDENTS | | CIV | |
|------------------|-------|---------------|----------|-----|-----|------------|
| | | | OFF | ENL | | |
| NAS North Island | 55138 | Note 1 | 10 | 10 | 5 | INPUT |
| | | | 0 | 0 | | AOB |
| | | | 0 | 0 | | CHARGEABLE |

COURSE TITLE: Initial Training for CH-53E Cadre Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: HMT 302

| LOCATION | UIC | DATE BEGIN | STUDENTS | | CIV | |
|----------------|-------|---------------|----------|-----|-----|------------|
| | | | OFF | ENL | | |
| MCAS New River | 55203 | Feb 05 | TBD | TBD | TBD | INPUT |
| | | | 0 | 0 | | AOB |
| | | | 0 | 0 | | CHARGEABLE |

III.A.1. INITIAL TRAINING

COURSE TITLE: Initial Training for SH-60B Cadre Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: HSL-40, HSL-41, MTU 1066 NAMTRAGRU DET Mayport, MTU 1022 NAMTRAU North Island

| LOCATION | UIC | DATE | STUDENTS | | CIV | |
|------------------|-------|----------|----------|-----|-----|------------|
| | | BEGIN | OFF | ENL | | |
| NAS North Island | 55138 | (Note 2) | TBD | TBD | TBD | INPUT |
| | | | 0 | 0 | | AOB |
| | | | 0 | 0 | | CHARGEABLE |

COURSE TITLE: Initial Training for CH-53E Squadron Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: CH-53E Squadrons

| LOCATION | UIC | DATE | STUDENTS | | CIV | |
|------------------------------|-------|--------|----------|-----|-----|------------|
| | | BEGIN | OFF | ENL | | |
| CH-53E Squadrons (Note 4) | 00000 | Mar 05 | TBD | TBD | TBD | INPUT |
| | | | 0 | 0 | | AOB |
| | | | 0 | 0 | | CHARGEABLE |

COURSE TITLE: Initial Training for SH-60B Squadron Personnel
COURSE DEVELOPER: NAVAIR
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 4 days
ACTIVITY DESTINATION: SH-60B Squadrons

| LOCATION | UIC | DATE | STUDENTS | | CIV | |
|------------------------------|-------|----------|----------|-----|-----|------------|
| | | BEGIN | OFF | ENL | | |
| SH-60B Squadrons (Note 4) | 00000 | (Note 3) | TBD | TBD | TBD | INPUT |
| | | | 0 | 0 | | AOB |
| | | | 0 | 0 | | CHARGEABLE |

Note 1. Initial training will be conducted 30 days prior to OT.

Note 2. Initial training will be conducted 45 days after OT.

Note 3. Initial training will be conducted 30 days prior to aircraft installation.

Note 4. Initial training for CH-53 and SH-60B squadron personnel will be conducted at each activity in conjunction with fleet introduction.

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the IMDS and, therefore, are not included in Part IV of this NTSP:

IV.C. Facility Requirements

IV.C.1. Facility Requirements Summary (Space/Support) by Activity

IV.C.2. Facility Requirements Detailed by Activity and Course

IV.C.3. Facility Project Summary by Program

Note: The IMDS will not delete any existing training hardware or courseware requirements and will not generate any additional facility requirements. The IMDS represents only a very small portion of the overall CH-53E and SH-60B Training Logistics Support Requirements. Training Logistics Support Requirements are addressed in detail in the CH-53E NTSP, A-50-7604G/A, dated February 2001, and the Light Airborne Multi-Purpose System (SH-60B) NTSP, A-50-7702C/D, dated August 2001. Therefore, only additions to existing training hardware and courseware requirements created as a result of the introduction of the IMDS are addressed in this NTSP.

IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-102-9945, CH-53A/D/E Communication/Navigation/Identification/Electronic Countermeasures Systems
(Track M-102-2731)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jan 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jan 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 001 | CH-53E IMDS Special Tool Kit | 1 | Jan 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

CIN, COURSE TITLE: C-602-9441, CH-53E Electrical Systems Integrated Organizational Maintenance (Track M-102-2731)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jan 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jan 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 001 | CH-53E IMDS Special Tool Kit | 1 | Jan 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

CIN, COURSE TITLE: C-602-9456, CH-53E Helicopter Mechanic Organizational Maintenance (Track M-601-2720)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jan 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jan 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 001 | CH-53E IMDS Special Tool Kit | 1 | Jan 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-603-9444, CH-53E Airframes Integrated Organizational Maintenance (Track M-602-2781)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jan 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jan 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 001 | CH-53E IMDS Special Tool Kit | 1 | Jan 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

CIN, COURSE TITLE: C-601-9407, H-60 Power Plants and Related Systems (Career) Organizational Maintenance (Track D-601-0813)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jul 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jul 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|--------------------------------|---|--------|-----|---------|
| 015 | High Speed Blade Balancing Kit | 1 | Jul 05 | CFE | Pending |
|-----|--------------------------------|---|--------|-----|---------|

CIN, COURSE TITLE: C-601-9407, H-60 Power Plants and Related Systems (Career) Organizational Maintenance (Track E-601-0813)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jul 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jul 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|--------------------------------|---|--------|-----|---------|
| 015 | High Speed Blade Balancing Kit | 1 | Jul 05 | CFE | Pending |
|-----|--------------------------------|---|--------|-----|---------|

IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-102-9409, SH-60B LAMPS MK III Weapon System Technician (Career) Organizational Maintenance
(Track D-102-0825)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jul 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jul 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 002 | SH-60B IMDS Special Tool Kit | 1 | Jul 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

CIN, COURSE TITLE: C-102-9409, SH-60B LAMPS MK III Weapon System Technician (Career) Organizational Maintenance
(Track E-102-0825)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|
|-----------------|--------------------------------------------------|-----------------|------------------|----------------|---------------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jul 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jul 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 002 | SH-60B IMDS Special Tool Kit | 1 | Jul 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

CIN, COURSE TITLE: C-602-9407, H-60 Electrical and Automatic Flight Control System (Career) Organizational Maintenance
(Track D-602-0854)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jul 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jul 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 002 | SH-60B IMDS Special Tool Kit | 1 | Jul 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-602-9407, H-60 Electrical and Automatic Flight Control System (Career) Organizational Maintenance
(Track E-602-0854)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|----------|-------------------------------------------|----------|-----------|---------|--------|
|----------|-------------------------------------------|----------|-----------|---------|--------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jul 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jul 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 002 | SH-60B IMDS Special Tool Kit | 1 | Jul 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

CIN, COURSE TITLE: C-603-9407, H-60 Airframes and Related Systems (Career) Organizational Maintenance
(Track D-602-0882)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|----------|-------------------------------------------|----------|-----------|---------|--------|
|----------|-------------------------------------------|----------|-----------|---------|--------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jul 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jul 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 002 | SH-60B IMDS Special Tool Kit | 1 | Jul 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

CIN, COURSE TITLE: C-603-9407, H-60 Airframes and Related Systems (Career) Organizational Maintenance
(Track E-602-0882)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| ITEM NO. | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQD | DATE REQD | GFE CFE | STATUS |
|----------|-------------------------------------------|----------|-----------|---------|--------|
|----------|-------------------------------------------|----------|-----------|---------|--------|

TTE

| | | | | | |
|-----|-----------------------------------------------------|---|--------|-----|---------|
| 010 | IMDS OBS Components (Individual Components are TBD) | 1 | Jul 05 | CFE | Pending |
|-----|-----------------------------------------------------|---|--------|-----|---------|

| | | | | | |
|-----|-------------------|---|--------|-----|---------|
| 011 | IMDS GBS Software | 1 | Jul 05 | CFE | Pending |
|-----|-------------------|---|--------|-----|---------|

ST

| | | | | | |
|-----|------------------------------|---|--------|-----|---------|
| 002 | SH-60B IMDS Special Tool Kit | 1 | Jul 05 | CFE | Pending |
|-----|------------------------------|---|--------|-----|---------|

IV.A.2. TRAINING DEVICES

Note: The following CH-53E and SH-60B Training Devices will require modification to include components of the IMDS:

DEVICE: 2F171, CH-53 Aircrew Procedures Trainer (APT)
DESCRIPTION: The CH-53E APT provides the capability for procedure and proficiency training of Pilots and Copilots under both normal and emergency conditions in the operation, navigation, and communications of the CH-53E Helicopter in fulfillment of their designated missions. This device only provides training in a stationary environment.

MANUFACTURER: NAWCAD
CONTRACT NUMBER: N0001999WXBS92A
TEE STATUS: NA

TRAINING ACTIVITY: HMT 302
LOCATION, UIC: MCAS New River, 31493

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|--------------------------------------------|
| 1 | FY01 | FY01 | Pending | MC-1 MC-2 MC-3 MC-4 M-601-2722 |

DEVICE: 2F174, CH-53 Weapons System Trainer (WST)
DESCRIPTION: The CH-53E WST is used to train crewmembers in all modes of the operational aircraft's mission. The device simulates the response of the CH-53E controls, instruments, and systems, to include the aural, motion, and force-feel sensations. The device provides the capability for procedure and proficiency training of Pilots and Copilots under both normal and emergency conditions in the operation, navigation, and communications of the CH-53E Helicopter in fulfillment of the designated missions.

MANUFACTURER: Sperry Rand Corporation (Now Unisys Corporation)
CONTRACT NUMBER: N61339-79-C-0079
TEE STATUS: NA

TRAINING ACTIVITY: HMT 302
LOCATION, UIC: MCAS New River, 31493

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|--------------------------------------------|
| 1 | May 94 | May 94 | Onboard | MC-1 MC-2 MC-3 MC-4 M-601-2722 |

IV.A.2. TRAINING DEVICES

DEVICE: 2F135, SH-60B Operational Flight Trainer
DESCRIPTION: Device description is classified Secret.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA

TRAINING ACTIVITY: HSL-40
LOCATION, UIC: NS Mayport, 53913

| QTY | DATE | RFT | STATUS | COURSES |
|-------------|-------------|-------------|---------------|--------------------------------------------------|
| REQD | REQD | DATE | | SUPPORTED |
| 2 | Jan 86 | Jan 86 | Onboard | D-2C-2501 D-2C-2502 D-2C-2503 D-2C-2504 |

TRAINING ACTIVITY: HSL-41
LOCATION, UIC: NAS North Island, 55138

| QTY | DATE | RFT | STATUS | COURSES |
|-------------|-------------|-------------|---------------|--------------------------------------------------|
| REQD | REQD | DATE | | SUPPORTED |
| 2 | Jan 86 | Jan 86 | Onboard | E-2C-2501 E-2C-2502 E-2C-2503 E-2C-2504 |

IV.A.2. TRAINING DEVICES

DEVICE: 14B51, SH-60B Weapons Tactics Trainer
DESCRIPTION: Device description is classified Secret.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-84-C-0025
TEE STATUS: NA

TRAINING ACTIVITY: HSL-40
LOCATION, UIC: NS Mayport, 53913

| QTY | DATE | RFT | STATUS | COURSES |
|-------------|-------------|-------------|---------------|--------------------------------------------------------------------------------------------|
| REQD | REQD | DATE | | SUPPORTED |
| 3 | Jan 85 | Jan 85 | Onboard | D-2C-2501 D-2C-2502 D-2C-2503 D-2C-2504 D-050-2505 D-050-2510 D-050-2511 |

TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: NAS North Island, 55138

| QTY | DATE | RFT | STATUS | COURSES |
|-------------|-------------|-------------|---------------|--------------------------------------------------------------------------------------------|
| REQD | REQD | DATE | | SUPPORTED |
| 2 | Jan 85 | Jan 85 | Onboard | E-2C-2501 E-2C-2502 E-2C-2503 E-2C-2504 E-050-2505 E-050-2510 E-050-2511 |

IV.A.2. TRAINING DEVICES

DEVICE: 980531-1002-01, CH-53E Composite Maintenance Trainer
DESCRIPTION: The CH-53E Composite Maintenance Trainer provides practical training for the power plant, power train, flight control, hydraulic, and miscellaneous systems.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N0600-91-D-0419
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|------------------------------------------------------------------------------------|
| 1 | Oct 91 | Oct 91 | Onboard | C-602-9441, as part of Track M-102-2731 C-602-9456, as part of Track M-601-2720 |

DEVICE: 985031-5707-01, CH-53E AFCS Maintenance Trainer
DESCRIPTION: The CH-53E AFCS Maintenance Trainer is utilized to simulate the AFCS system and allow the maintenance technicians to learn proper troubleshooting procedures, component location, installation, removal, and system operation.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N00019-68-C-014
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|-----------------------------------------|
| 1 | Mar 86 | Mar 86 | Onboard | C-602-9451, as part of Track M-102-2731 |

DEVICE: 980531-2401-01, CH-53E Auxiliary Power Plant Trainer
DESCRIPTION: The CH-53E Auxiliary Power Plant Trainer provides the equipment necessary for training technicians to maintain the CH-53E auxiliary power plant.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N00019-68-C-047
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|-----------------------------------------|
| 1 | Sep 82 | Sep 82 | Onboard | C-602-9456, as part of Track M-601-2720 |

IV.A.2. TRAINING DEVICES

DEVICE: 980531-1502-01, CH-53 Rotor Head Trainer
DESCRIPTION: The Rotor Head Trainer is used to provide hands on training to Power Plants and Airframe Technicians for the removal, replacement, and alignment of Components on the rotor head.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N00019-78-C-041
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|---------------------|----------------------|---------------------|---------------|------------------------------------------------------------------------------------|
| 1 | Jan 94 | Jan 94 | Onboard | C-602-9456, as part of Track M-601-2720 C-603-9444, as part of Track M-602-2781 |

DEVICE: 980531-7103-01, CH-53E Communication, Navigation, and Identification Systems Trainer
DESCRIPTION: The CH-53E Communication, Navigation, and Identification Systems Trainer provides Avionics Technicians training on the avionics systems used in the CH-53E Helicopter including system testing, troubleshooting, component removal, and replacement.
MANUFACTURER: EER Systems
CONTRACT NUMBER: Not Available
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|---------------------|----------------------|---------------------|---------------|-----------------------------------------|
| 1 | Sep 96 | Sep 96 | Onboard | C-602-9441, as part of Track M-102-2731 |

DEVICE: 980531-4202-01, CH-53A/D Electrical Systems Trainer
DESCRIPTION: The CH-53E Electrical Systems Trainer provides Avionics Technicians training on the electrical systems of the helicopter including system testing, troubleshooting, component removal, and replacement.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: N00019-68-C-047
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|---------------------|----------------------|---------------------|---------------|-----------------------------------------|
| 1 | Sep 85 | Sep 85 | Onboard | C-602-9441, as part of Track M-102-2731 |

IV.A.2. TRAINING DEVICES

DEVICE: CH-53D Practical Job Trainer
DESCRIPTION: The CH-53D Practical Job Trainer provides practical training for the power plant, power train, flight control, hydraulic, and miscellaneous systems.
MANUFACTURER: Sikorsky Aircraft Corporation
CONTRACT NUMBER: Not Available
TEE STATUS: NA

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|------------------------------------------------------------------------------------|
| 1 | Jan 94 | Jan 94 | Onboard | C-602-9456, as part of Track M-601-2720 C-603-9444, as part of Track M-602-2781 |

DEVICE: SH-60B AFCS Trainer
DESCRIPTION: The AFCS Trainer provides training on the stabilator system, analog stability augmentation system, and the electronic flight control system. Trainer applications include: demonstrations of principles of operation, practical application of testing, troubleshooting, servicing, removal and installation procedures, and student performance testing.

MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|-------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-102-9409 (Track D-102-0825) C-602-9409 (Track D-602-0855) C-602-9407 (Track D-602-0854) |

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|-------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-102-9409 (Track D-102-0825) C-602-9409 (Track E-602-0855) C-602-9407 (Track D-602-0854) |

IV.A.2. TRAINING DEVICES

DEVICE: SH-60B Avionics Maintenance Trainer
DESCRIPTION: The AMT provides training in the checkout, troubleshooting, and repair techniques essential to restore the SH-60B Avionics System to an operational readiness condition.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA
TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|-------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-102-9406 (Track D-102-0820) C-102-9409 (Track D-102-0825) C-602-9407 (Track D-602-0854) |

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|-------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-102-9406 (Track E-102-0820) C-102-9409 (Track E-102-0825) C-602-9407 (Track E-602-0854) |

DEVICE: SH-60 Composite Maintenance Trainer
DESCRIPTION: The CMT provides training for airframe, power plants, power train, hydraulics, flight controls, and instrument/indicating systems. Trainer applications include demonstrations of principles of operation, practical application of testing, troubleshooting, servicing, removal and installation procedures, and student performance testing.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|----------------------------------------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-601-9408 (Track D-602-0810) C-601-9407 (Track D-601-0813) C-603-9408 (Track D-602-0883) C-603-9407 (Track D-602-0882) |

IV.A.2. TRAINING DEVICES

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|----------------------------------------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-601-9408 (Track E-602-0810) C-601-9407 (Track E-601-0813) C-603-9408 (Track E-602-0883) C-603-9407 (Track E-602-0882) |

DEVICE: SH-60 Main Blade/BIM Trainer
DESCRIPTION: The Main Blade/BIM Trainer provides training on the main blade and BIM systems. Trainer applications include: removal, installation, and servicing of the main rotor blade and BIM servicing.
MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|----------------------------------------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-601-9408 (Track D-602-0810) C-601-9407 (Track D-601-0813) C-602-9407 (Track D-602-0854) C-603-9407 (Track D-602-0882) |

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|----------------------------------------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-601-9408 (Track E-602-0810) C-601-9407 (Track E-601-0813) C-602-9407 (Track E-602-0854) C-603-9407 (Track E-602-0882) |

IV.A.2. TRAINING DEVICES

DEVICE: SH-60 Starboard Engine Part Task Trainer
DESCRIPTION: The Starboard Engine Part Task Trainer provides training on maintenance of the Engine Systems. Trainer applications include: demonstrations of starboard engine installation, interface, and control system adjustments, principles of operation, practical application of testing, and troubleshooting, servicing, removal and installation procedures, and student performance testing.

MANUFACTURER: Lockheed
CONTRACT NUMBER: N00019-81-C-0172
TEE STATUS: NA

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|----------------------------------------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-601-9408 (Track D-602-0810) C-601-9407 (Track D-601-0813) C-602-9409 (Track D-602-0855) C-602-9407 (Track D-602-0854) |

TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

| QTY REQD | DATE REQD | RFT DATE | STATUS | COURSES SUPPORTED |
|-------------|--------------|-------------|---------|----------------------------------------------------------------------------------------------------------------------------------|
| 1 | Jan 84 | Jan 84 | Onboard | C-601-9408 (Track E-602-0810) C-601-9407 (Track E-601-0813) C-602-9409 (Track E-602-0855) C-602-9407 (Track E-602-0854) |

IV.B. COURSEWARE REQUIREMENTS

IV.B.1. TRAINING SERVICES

| COURSE/TYPE OF TRAINING | SCHOOL LOCATION, UIC | NO. OF PERSONNEL | MAN WEEKS REQUIRED | DATE BEGIN |
|------------------------------------------------|-------------------------------------|------------------|--------------------|----------------------|
| Initial training for CH-53E OT personnel | HMT 302 MCAS New River 31493 | 4 | 8 | Sep 02 (Complete) |
| Initial training for SH-60B OT personnel | HSL-41 FRS North Island 55138 | 25 | 1 | See Note 1 |
| Initial training for CH-53E cadre personnel | HMT 302 MCAS New River 55203 | TBD | TBD | Feb 05 |
| Initial training for SH-60B cadre personnel | HSL-41 FRS North Island 55138 | 25 | 1 | See Note 2 |
| Initial training for CH-53E squadron personnel | Fleet Squadron See Note 4 | TBD | TBD | Mar 05 |
| Initial training for SH-60B squadron personnel | Fleet Squadron See Note 4 | 25 | 1 | See Note 3 |

Note 1: Initial training will be conducted 30 days prior to OT.

Note 2: Initial training will be conducted 45 days after OT.

Note 3: Initial training will be conducted 30 days prior to aircraft installation.

Note 4: Initial training for squadron personnel will be conducted at individual activities in conjunction with fleet introduction.

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

Note: Additional training materials will be required to support IMDS in the form of Lesson Plans (LP), Training Course Control Documents, Trainee Guide Book (TGB), tests with test plan, and possibly graphics and/or Interactive Multi Media Instruction (IMI). These materials are contracted for by the Program Manager, with inputs from NAMTRAGRU and provided to NAMTRAGRU. The IMDS will also create a requirement for training aids. All other curricula materials requirements are addressed in detail in the CH-53E NTSP, A-50-7604G/A, dated February 2001, and the Light Airborne Multi-Purpose System (SH-60B) NTSP, A-50-7702C/D, dated August 2001 and, therefore, will not be duplicated in this NTSP.

IV.B.3. TECHNICAL MANUALS

Note: No new technical manuals will be developed to support the IMDS. No existing technical manuals will be deleted as a result of the IMDS. IMDS data will be incorporated into existing technical manuals. The following CH-53E and SH-60B technical manuals will require revision to include IMDS information.

CIN, COURSE TITLE: MC-1, CH-53 Basic Pilot Training
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-----------------------------------------------------------------------|-----------|----------|-----------|---------|
| A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter | Hard copy | 14 | Jun 99 | Onboard |
| A1-H53BE-NFM-500 NATOPS Pilots Pocket Checklist, CH-53E Helicopter | Hard copy | 14 | Jun 99 | Onboard |

CIN, COURSE TITLE: MC-2, CH-53 Transition Pilot Training
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-----------------------------------------------------------------------|-----------|----------|-----------|---------|
| A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter | Hard copy | 12 | Jun 99 | Onboard |
| A1-H53BE-NFM-500 NATOPS Pilots Pocket Checklist, CH-53E Helicopter | Hard copy | 12 | Jun 99 | Onboard |

CIN, COURSE TITLE: MC-3, CH-53 Conversion Pilot Training
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-----------------------------------------------------------------------|-----------|----------|-----------|---------|
| A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter | Hard copy | 3 | Jun 99 | Onboard |
| A1-H53BE-NFM-500 NATOPS Pilots Pocket Checklist, CH-53E Helicopter | Hard copy | 3 | Jun 99 | Onboard |

CIN, COURSE TITLE: MC-4, CH-53 Refresher Pilot Training
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-----------------------------------------------------------------------|-----------|----------|-----------|---------|
| A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter | Hard copy | 3 | Jun 99 | Onboard |
| A1-H53BE-NFM-500 NATOPS Pilots Pocket Checklist, CH-53E Helicopter | Hard copy | 3 | Jun 99 | Onboard |

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: M-601-2722, CH-53E Crew Chief Training Syllabus
TRAINING ACTIVITY: HMT 302 FRS
LOCATION, UIC: MCAS New River, 55203

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|---------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H53CE-MRC-100 CH-53E/MH-53E Turnaround Checklist, Organizational Maintenance instruction | Hard copy | 40 | Jun 99 | Onboard |
| A1-H53BE-NFM-000 NATOPS Flight Manual, CH-53E Helicopter | Hard copy | 40 | Jun 99 | Onboard |
| A1-H53BE-NFM-900 NATOPS Aircrew Pocket Checklist, CH-53E Helicopter | Hard copy | 40 | Jun 99 | Onboard |

CIN, COURSE TITLE: D-2C-2501, SH-60B Category I Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement) | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-TAC-000 Weapon System Tactical Manual | Hard copy | 20 | Jan 84 | Onboard |

CIN, COURSE TITLE: E-2C-2501, SH-60B Category I Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement) | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-500 | Hard copy | 20 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

NATOPS Pilot's Pocket Checklist

| | | | | |
|-------------------------------------------------|-----------|----|--------|---------|
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |
|-------------------------------------------------|-----------|----|--------|---------|

| | | | | |
|---------------------------------------------------|-----------|----|--------|---------|
| A1-H60BB-TAC-000 Weapon System Tactical Manual | Hard copy | 20 | Jan 84 | Onboard |
|---------------------------------------------------|-----------|----|--------|---------|

CIN, COURSE TITLE: D-2C-2502, SH-60B Category III Fleet Replacement Pilot

TRAINING ACTIVITY: HSL-40 FRS

LOCATION, UIC: Mayport, 53913

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement) | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-TAC-000 Weapon System Tactical Manual | Hard copy | 20 | Jan 84 | Onboard |

CIN, COURSE TITLE: E-2C-2502, SH-60B Category III Fleet Replacement Pilot

TRAINING ACTIVITY: HSL-41 FRS

LOCATION, UIC: North Island, 55138

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement) | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-TAC-000 Weapon System Tactical Manual | Hard copy | 20 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: D-2C-2503, SH-60B Category II Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement) | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-TAC-000 Weapon System Tactical Manual | Hard copy | 20 | Jan 84 | Onboard |

CIN, COURSE TITLE: E-2C-2503, SH-60B Category II Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement) | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-TAC-000 Weapon System Tactical Manual | Hard copy | 20 | Jan 84 | Onboard |

CIN, COURSE TITLE: D-2C-2504, SH-60B Category IV Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

| | | | | |
|-------------------------------------------------------------------|-----------|----|--------|---------|
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement) | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-TAC-000 Weapon System Tactical Manual | Hard copy | 20 | Jan 84 | Onboard |

CIN, COURSE TITLE: E-2C-2504, SH-60B Category IV Fleet Replacement Pilot
TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010C Weapon System Manual (Classified Supplement) | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-500 NATOPS Pilot's Pocket Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-TAC-000 Weapon System Tactical Manual | Hard copy | 20 | Jan 84 | Onboard |

CIN, COURSE TITLE: D-050-2505, SH-60B Fleet Replacement Aircrewman Instructor Under Training
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |

CIN, COURSE TITLE: D-050-2505, SH-60B Fleet Replacement Aircrew Instructor Under Training

IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |

IN, COURSE TITLE: D-050-2510, SH-60B Category I Fleet Replacement Aircrewman (FRAC) Pipeline
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |

CIN, COURSE TITLE: D-050-2511, SH-60B Category III Fleet Replacement Aircrewman (FRAC) Pipeline
TRAINING ACTIVITY: HSL-40 FRS
LOCATION, UIC: Mayport, 53913

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-700 NATOPS Functional Checklist | Hard copy | 20 | Jan 84 | Onboard |

CIN, COURSE TITLE: E-050-2511, SH-60B Category III Fleet Replacement Aircrewman (FRAC) Pipeline
TRAINING ACTIVITY: HSL-41 FRS
LOCATION, UIC: North Island, 55138

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-NFM-000 NATOPS Flight Manual | Hard copy | 20 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 Weapon System Manual | Hard copy | 20 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

A1-H60BB-NFM-700 Hard copy 20 Jan 84 Onboard
 NATOPS Functional Checklist

CIN, COURSE TITLE: C-102-9945, CH-53A/D/E Communication/Navigation/Identification/Electronic Countermeasures Systems Organizational Maintenance, as part of Track M-102-2731

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|------------------------------------------------------|-----------|----------|-----------|---------|
| A1-H53CE-570-000 Automatic Flight Control Systems | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-570-200 Automatic Flight Control Systems | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-570-400 Automatic Flight Control Systems | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-600-000 Communication Systems | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-600-400 Communication Systems (IPB) | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-700-000 Navigation Systems | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-700-400 Navigation Systems | Hard copy | 40 | Oct 91 | Onboard |

CIN, COURSE TITLE: C-602-9441, CH-53E Electrical Systems Integrated Organizational Maintenance, as part of Track M-102-2731

TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|--------------------------------------------------------------------|-----------|----------|-----------|---------|
| A1-H53CE-220-000 Propulsion Systems Organizational Maintenance | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-AML-000 Technical Manual | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-420-000 Electrical Systems Organizational Maintenance | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-420-100 Electrical Systems Principal of Operation | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-420-200 Electrical Systems Testing and Troubleshooting | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-420-400 Electrical System IPB | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-500-000 | Hard copy | 40 | Oct 91 | Onboard |

IV.B.3. TECHNICAL MANUALS

Instrument Systems Maintenance

| | | | | |
|-------------------------------------------|-----------|----|--------|---------|
| A1-H53CE-500-400 Instrument System IPB | Hard copy | 40 | Oct 91 | Onboard |
|-------------------------------------------|-----------|----|--------|---------|

CIN, COURSE TITLE: C-602-9451, CH-53E Dual Digital Automatic Flight Control System Integrated Organizational Maintenance (Track M-102-2731)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|---------------------------------------------------------------------------------|-----------|----------|-----------|---------|
| A1-H53CE-570-000 Automatic Flight Control Systems Organizational Maintenance | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53BE-NFM-000 NATOPS Flight Manual | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-140-000 Flight Control Systems Organizational Maintenance | Hard copy | 40 | Oct 91 | Onboard |
| A1-H53CE-140-400 Flight Control Systems IPB | Hard copy | 40 | Oct 91 | Onboard |

CIN, COURSE TITLE: C-602-9456, CH-53E Helicopter Mechanic Organizational Maintenance (Track M-601-2720)

TRAINING ACTIVITY: NAMTRA MARUNIT

LOCATION, UIC: MCAS New River, 31493

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-----------------------------------------------------------------------------------------|-----------|----------|-----------|---------|
| A1-H53AD-140-000 Flight Control Systems Manual with IPB | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53AD-150-000 Rotor systems Manual with IPB | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53AD-260-000 Transmission Systems Manual with IPB | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53AD-GAI-000 General Aircraft Information | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53AD-IPB-450 Organizational and Intermediate Illustrated Parts Breakdown | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-MRC-000 Periodic Maintenance Information Cards | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-MRC-100 Turnaround Checklist | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-MRC-300 Special/Conditional/Preservation/ASPA Maintenance Requirement Cards | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-110-000 Airframe Systems Maintenance | Hard copy | 30 | Sep 93 | Onboard |

IV.B.3. TECHNICAL MANUALS

| | | | | |
|--------------------------------------------------------|-----------|----|--------|---------|
| A1-H53CE-140-000 Flight Control systems Maintenance | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-140-100 Flight Control Systems POM | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-140-400 Flight Control Systems IPB | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-150-000 Rotor Systems Maintenance | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-150-400 Rotor Systems IPB | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-220-400 Propulsion Systems IPB | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-260-000 Transmission Systems Maintenance | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-260-400 Transmission Systems IPB | Hard copy | 30 | Sep 93 | Onboard |

CIN, COURSE TITLE: C-603-9444, CH-53E Airframes Integrated Organizational Maintenance (Track M-602-2781)
TRAINING ACTIVITY: NAMTRA MARUNIT
LOCATION, UIC: MCAS New River, 31493

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|---------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H53AD-110-000 Airframe System Maintenance with IPB | Hard copy | 30 | Jan 94 | Onboard |
| A1-H53AD-140-000 Flight Control Systems Maintenance with IPB | Hard copy | 30 | Jan 94 | Onboard |
| A1-H53CE-150-000 Rotor Systems Maintenance | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-150-400 Rotor Systems IPB | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-260-000 Transmission Systems Maintenance | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-260-400 Transmission Systems IPB | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-000-000 Utility Systems Maintenance | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53CE-400-400 Utility Systems IPB | Hard copy | 30 | Sep 93 | Onboard |
| A1-H53AD-GAI-000 General Information Manual | Hard copy | 30 | Jan 94 | Onboard |
| A1-H53CE-110-000 Airframe Maintenance Organizational Maintenance | Hard copy | 30 | Jan 94 | Onboard |

IV.B.3. TECHNICAL MANUALS

| | | | | |
|----------------------------------------------------------------------------------------------------|-----------|----|--------|---------|
| A1-H53CE-140-000 Manual Flight Control Systems Organizational Maintenance | Hard copy | 30 | Jan 94 | Onboard |
| A1-H53CE-150-000 Rotor Systems Organizational Maintenance | Hard copy | 30 | Jan 94 | Onboard |
| A1-H53CE-220-000 Propulsion Systems Organizational Maintenance | Hard copy | 30 | Jan 94 | Onboard |
| A1-H53CE-260-000 Transmission Systems Organizational Maintenance | Hard copy | 30 | Jan 94 | Onboard |
| A1-H53CE-GAI-000 General Aircraft Information Manual Organizational Maintenance | Hard copy | 30 | Jan 94 | Onboard |
| A1-H53CE-IPB-450 Numerical Index and Reference Designation Index Organizational Maintenance IPB | Hard copy | 30 | Jan 94 | Onboard |
| A1-H53CE-SRM-000 Structural Repair Manual, Model CH53E | Hard copy | 30 | Jan 94 | Onboard |

CIN, COURSE TITLE: C-102-9406, SH-60B LAMPS MK III Weapon Systems Technician (Initial) Organizational Maintenance (Track D-102-0820)
TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|----------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-690-100 Principles of Operation, Communications Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-690-400 Illustrated Parts Breakdown, Communications Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-720-400 Illustrated Parts Breakdown, Mission Equipment Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-740-100 Principles of Operation, Data Handling/Data Display Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-740-400 Illustrated Parts Breakdown, Data Handling/Data Display Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

| | | | | |
|-----------------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-750-400 Illustrated Parts Breakdown, Weapons Delivery Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-IWS-100 Principles of Operation, Integrated Weapon System, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-000 Periodic Maintenance Information Cards, Navy Model SH-60B | Hard Copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-100 Turnaround Checklist, Navy Model SH-60B | Hard Copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-300 Daily Maintenance Requirements Cards, Model SH-60B | Hard Copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Special/Preservation/ASPA Maintenance Requirement Cards, Model SH-60B | Hard Copy | 8 | Jan 84 | Onboard |
| A1-H60BB-NFM-000 NATOPS Flight Manual, Navy Model SH-60B | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 LAMPS MK III Weapon System Manual | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-WDM-000 Wiring Data Manual, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-102-9406, SH-60B LAMPS MK III Weapon Systems Technician (Initial) Organizational Maintenance (Track E-102-0820)
TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|----------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-690-100 Principles of Operation, Communications Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-690-400 Illustrated Parts Breakdown, Communications Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy | IETM Format | 8 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

Models SH-60B and SH-60F

| | | | | |
|-------------------------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-720-400 Illustrated Parts Breakdown, Mission Equipment Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-740-100 Principles of Operation, Data Handling/Data Display Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-740-400 Illustrated Parts Breakdown, Data Handling/Data Display Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-750-400 Illustrated Parts Breakdown, Weapons Delivery Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-IWS-100 Principles of Operation, Integrated Weapon System, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-000 Periodic Maintenance Information Cards, Navy Model SH-60B | Hard Copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-100 Turnaround Checklist, Navy Model SH-60B | Hard Copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-300 Daily Maintenance Requirements Cards, Model SH-60B | Hard Copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Special/Preservation/ASPA Maintenance Requirement Cards, Model SH-60B | Hard Copy | 8 | Jan 84 | Onboard |
| A1-H60BB-NFM-000 NATOPS Flight Manual, Navy Model SH-60B | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 LAMPS MK III Weapon System Manual | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-WDM-000 Wiring Data Manual, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-102-9409, SH-60B LAMPS MK III Weapon System Technician (Career) Organizational Maintenance (Track D-102-0825)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

IV.B.3. TECHNICAL MANUALS

LOCATION, UIC: NS Mayport, 66069

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-690-100 Principles of Operation, Communications Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-740-100 Principles of Operation, Data Handling/Data Display Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-ATM-010 Avionics Test Manual Checklist, Navy Model SH-60B | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-IWS-100 Principles of Operation, Integrated Weapon System, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 LAMPS MK III Weapon System Manual | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-102-9409, SH-60B LAMPS MK III Weapon System Technician (Career) Organizational Maintenance (Track E-102-0825)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-690-100 Principles of Operation, Communications Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-740-100 Principles of Operation, Data Handling/Data Display Subsystem, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy | IETM Format | 8 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

Models SH-60B and SH-60F

| | | | | |
|------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-ATM-010 Avionics Test Manual Checklist, Navy Model SH-60B | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-IWS-100 Principles of Operation, Integrated Weapon System, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-NFM-010 LAMPS MK III Weapon System Manual | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-601-9408, SH-60F/HH-60H Power Plants and Related Systems (Initial) Organizational Maintenance (Track D-602-0810)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|--------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-460-100 Principles of Operation, Fuel Systems, Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-510-100 Principles of Operation, Instrument Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-IPB-450 Illustrated Parts Breakdown, Numerical Index and Reference Designation Index, Navy Model SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-690-100 Principles of Operation, Communications Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-710-100 Principles of Operation, Navigation Systems, Navy Models | IETM Format | 8 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

SH-60B, SH-60F, HH-60H, and HH-60J

| | | | | |
|----------------------------------------------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60CA-740-100 Principles of Operation, Tactical Data Management Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-100 Turnaround Checklist, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-300 Daily Maintenance Requirements, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60CA-WDM-000 Wiring Data Manual, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | IETM Format | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-601-9408, SH-60F/HH-60H Power Plants and Related Systems (Initial) Organizational Maintenance
(Track E-602-0810)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|----------------------|---------------|
| A1-H60BB-460-100 Principles of Operation, Fuel Systems, Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-510-100 Principles of Operation, Instrument Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-720-100 Principles of Operation, Mission Sensor Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-IPB-450 Illustrated Parts Breakdown, Numerical Index and Reference Designation Index, Navy Model SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

| | | | | |
|-------------------------------------------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60CA-690-100 Principles of Operation, Communications Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-710-100 Principles of Operation, Navigation Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-740-100 Principles of Operation, Tactical Data Management Systems, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-100 Turnaround Checklist, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-300 Daily Maintenance Requirements, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60CA-WDM-000 Wiring Data Manual, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | IETM Format | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-601-9407, H-60 Power Plants and Related Systems (Career) Organizational Maintenance (Track D-601-0813)
TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET
LOCATION, UIC: NS Mayport, 66069

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-400 Phased Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, HH-60J | Hard copy | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-601-9407, H-60 Power Plants and Related Systems (Career) Organizational Maintenance (Track E-601-0813)
TRAINING ACTIVITY: MTU 1022 NAMTRAU
LOCATION, UIC: NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

A1-H60CA-MRC-400 Hard copy 8 Jan 84 Onboard
 Phased Maintenance Requirements Cards, Navy Models SH-60B,
 SH-60F, HH-60H, HH-60J

CIN, COURSE TITLE: C-602-9409, H-60 Electrical/Instrument and Flight Control Systems (Initial) Organizational Maintenance
 (Track D-602-0855)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|----------------------------------------------------------------------------------------------------------|---------------|---------------------|----------------------|---------------|
| A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-NFM-000 NATOPS Flight Manual, Navy Model SH-60B | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-IPB-450 Illustrated Parts Breakdown, Numerical Index and Reference Designation Index | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60CA-WDM-000 Wiring Data Manual, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-420-100 Principles of Operation, Electrical Power and Aircraft Lighting Systems | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-460-100 Principles of Operation, Fuel System | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-510-100 Principles of Operation, Instrument Systems | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-720-100 Principles of Operation, Mission Sensor Systems | IETM Format | 8 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-602-9409, H-60 Electrical/Instrument and Flight Control Systems (Initial) Organizational Maintenance (Track E-602-0855)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-NFM-000 NATOPS Flight Manual, Navy Model SH-60B | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-IPB-450 Illustrated Parts Breakdown, Numerical Index and Reference Designation Index | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60CA-WDM-000 Wiring Data Manual, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-420-100 Principles of Operation, Electrical Power and Aircraft Lighting Systems | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-460-100 Principles of Operation, Fuel System | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-510-100 Principles of Operation, Instrument Systems | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-720-100 Principles of Operation, Mission Sensor Systems | IETM Format | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-602-9407, H-60 Electrical and Automatic Flight Control System (Career) Organizational Maintenance (Track D-602-0854)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|--------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-460-100 Principles of Operation, Fuel Systems, Models SH-60B | IETM Format | 8 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

and SH-60F

| | | | | |
|-------------------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
|-------------------------------------------------------------------------------------------------------|-------------|---|--------|---------|

| | | | | |
|-------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
|-------------------------------------------------------|-------------|---|--------|---------|

| | | | | |
|------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS | IETM Format | 8 | Jan 84 | Onboard |
|------------------------------------------------------------------------|-------------|---|--------|---------|

CIN, COURSE TITLE: C-602-9407, H-60 Electrical and Automatic Flight Control System (Career) Organizational Maintenance (Track E-602-0854)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------------------------|-------------|----------|-----------|---------|
| A1-H60BB-460-100 Principles of Operation, Fuel Systems, Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |

| | | | | |
|-------------------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
|-------------------------------------------------------------------------------------------------------|-------------|---|--------|---------|

| | | | | |
|-------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
|-------------------------------------------------------|-------------|---|--------|---------|

| | | | | |
|------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS | IETM Format | 8 | Jan 84 | Onboard |
|------------------------------------------------------------------------|-------------|---|--------|---------|

CIN, COURSE TITLE: C-603-9408, H-60 Airframes and Related Systems (Initial) Organizational Maintenance (Track D-602-0883)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|----------------------------------------------------------------------------------------------------------------|-------------|----------|-----------|---------|
| A1-H60BB-110-100 Principles of Operation, Airframes and Landing Gear Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |

| | | | | |
|----------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-410-100 Principles of Operation, Environmental Control System, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
|----------------------------------------------------------------------------------------------|-------------|---|--------|---------|

| | | | | |
|-------------------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
|-------------------------------------------------------------------------------------------------------|-------------|---|--------|---------|

| | | | | |
|----------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy | IETM Format | 8 | Jan 84 | Onboard |
|----------------------------------------------------------------------------|-------------|---|--------|---------|

IV.B.3. TECHNICAL MANUALS

Models SH-60B and SH-60F

| | | | | |
|----------------------------------------------------------------------------------------------------|-------------|---|--------|---------|
| A1-H60BB-SRM-400 Organizational and Intermediate Structural Repair, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60FB-410-100 Principles of Operation, Environmental Control Systems | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60FB-560-100 Principles of Operation, Flight Reference and AFCS | IETM Format | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-603-9408, H-60 Airframes and Related Systems (Initial) Organizational Maintenance (Track E-602-0883)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|----------------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-110-100 Principles of Operation, Airframes and Landing Gear Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-410-100 Principles of Operation, Environmental Control System, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-560-100 Principles of Operation, Flight Reference and AFCS, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-750-100 Principles of Operation, Weapons Delivery System, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-SRM-400 Organizational and Intermediate Structural Repair, Navy Model SH-60B | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |
| A1-H60FB-410-100 | IETM Format | 8 | Jan 84 | Onboard |

IV.B.3. TECHNICAL MANUALS

Principles of Operation, Environmental Control Systems

| | | | | |
|----------------------------------------------------|-------------|---|--------|---------|
| A1-H60FB-560-100 | IETM Format | 8 | Jan 84 | Onboard |
| Principles of Operation, Flight Reference and AFCS | | | | |

CIN, COURSE TITLE: C-603-9407, H-60 Airframes and Related Systems (Career) Organizational Maintenance (Track D-602-0882)

TRAINING ACTIVITY: MTU 1066 NAMTRAGRU DET

LOCATION, UIC: NS Mayport, 66069

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-110-000 Principles of Operation, Airframes and Landing Gear Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |

CIN, COURSE TITLE: C-603-9407, H-60 Airframes and Related Systems (Career) Organizational Maintenance (Track E-602-0882)

TRAINING ACTIVITY: MTU 1022 NAMTRAU

LOCATION, UIC: NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE: | MEDIUM | QTY REQD | DATE REQD | STATUS |
|-------------------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|---------------|
| A1-H60BB-110-000 Principles of Operation, Airframes and Landing Gear Systems, Navy Models SH-60B and SH-60F | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60BB-WUC-800 Work Unit Code Manual, Model H-60 | IETM Format | 8 | Jan 84 | Onboard |
| A1-H60CA-MRC-350 Maintenance Requirements Cards, Navy Models SH-60B, SH-60F, HH-60H, and HH-60J | Hard copy | 8 | Jan 84 | Onboard |



PART V - MPT MILESTONES

| COG CODE | MPT MILESTONES | DATE | STATUS |
|-----------------|------------------------------------------------------------------------------|-------------|---------------|
| CNO | Approved Mission Needs Statement for IMD | Jun 94 | Completed |
| PDA | Conducted Initial Training for CH-53E and SH-60B IMDS DT | Sep 99 | Completed |
| PDA | Began CH-53E and SH-60B IMDS DT | Sep 99 | Completed |
| PEO(A) | Reached LRIP Decision for CH-53E IMDS | Aug 00 | Completed |
| TSA | Developed Initial NTSP | Feb 01 | Completed |
| PEO(A) | Reached LRIP Decision for SH-60B IMDS | Apr 01 | Completed |
| TSA | Developed Draft NTSP | Aug 02 | Completed |
| PDA | Conducted Technical Publication Validation and Verification | Aug 02 | Completed |
| PDA | Achieve CH-53E IMDS IOC | Oct 02 | Completed |
| PDA | Conduct Initial Training for CH-53E IMDS OT Personnel | Oct 02 | Completed |
| TSA | Developed Proposed NTSP | Dec 02 | Completed |
| PDA | Conduct Initial Training for SH-60B IMDS OT Personnel | Jan 03 | Pending |
| PDA | Begin SH-60B IMDS OT | Feb 03 | Pending |
| PDA | Conduct Initial Training for CH-53E IMDS Cadre Personnel | Feb 03 | Pending |
| PDA | Conduct Initial Training for SH-60B IMDS Cadre Personnel | Apr 03 | Pending |
| PDA | Achieve SH-60B IMDS IOC | May 04 | Pending |
| PDA | Complete CH-53E IMDS DT | Jul 04 | Pending |
| PDA | Begin CH-53E IMDS initial Fleet Introduction Training for Squadron Personnel | Feb 05 | Pending |
| TA | Achieve RFT Date for CH-53E IMDS Follow-On Training | Mar 05 | Pending |
| PDA | Complete CH-53E IMDS OT | Mar 05 | Pending |
| PDA | Begin SH-60B IMDS Initial Fleet Introduction Training for Squadron Personnel | Aug 05 | Pending |
| PDA | Complete SH-60B IMDS OT | Sep 05 | Pending |
| TA | Achieve RFT Date for SH-60B IMDS Follow-On Training | Sep 05 | Pending |
| PDA | Achieve IMDS NSD | FY06 | Pending |
| PDA | Achieve IMDS MSD | TBD | Pending |
| TSA | Begin Modification of TDs at IMDS Training Sites | TBD | Pending |
| TSA | Deliver IMDS TTE to Follow-On Training Sites | TBD | Pending |
| TSA | Deliver STs to IMDS Follow-On Training Sites | TBD | Pending |
| TSA | Deliver Updated Technical Publications to Follow-On Training Sites | TBD | Pending |



PART VI - DECISION ITEMS / ACTION REQUIRED

| DECISION ITEM OR ACTION REQUIRED | COMMAND ACTION | DUE DATE | STATUS |
|----------------------------------------------------|-----------------------|-----------------|---------------|
| No Decision Items or Action required at this time. | | | |



PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

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PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

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PART VII - POINTS OF CONTACT

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SUMMARY OF COMMENTS

ON THE

**INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM**

DRAFT NAVY TRAINING SYSTEM PLAN

OF AUGUST 2002

N88-NTSP-A-50-0105/D

Prepared by: ATC John Miller, AIR-3.4.1
Contact at: (301) 757-8260
Date submitted: 25 November 2002

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM**

DRAFT NAVY TRAINING SYSTEM PLAN

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**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

ACTIVITY NAME: Naval Education and Training Command

COMMENT: Page I-37, paragraphs 3 and 4

Does not specify who is going to fund the IETMS or the new tools for the IMDHUMS. For the IETMS, if there is another document specifying this, it should be stated in this NTSP somewhere. This will ensure there is no confusion on who is paying for them and a timeline will be set on when they will be incorporated in the squadrons.

INCORPORATED: No

REMARKS: Contact PMA205-2D1 or PMA299 for SH-60B funding issues or AIR 3.1.2F for H-53 funding issues.

COMMENT: Page I-8

Outlines the initial training plan to cover requirements until the course material is added to existing courses. The content needs to be web-deliverable to allow for refresher training “anytime/anywhere”. Additionally, new content development must adhere to the policy and guidance supporting an enterprise learning architecture set forth in CNET message: R081538Z OCT 02. The Naval Personnel Development Center (NPDC) will provide detailed guidance in the near future.

INCORPORATED: No

REMARKS: When guidance from NPDC is published it will be included in updates to this document.

COMMENT: General

There are sure a lot of TBDs on all the required and ready for training dates. Let’s get dates put in there and adjust as necessary.

INCORPORATED: Yes

REMARKS: Many TBDs have been replaced with dates and others will continue to be updated as data becomes available.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

ACTIVITY NAME: Naval Education and Training Professional Development and Technical Center

COMMENT: Paragraph I.H.4.a

Initial Training is given as spanning from 1 to 3 days. In element III.A.1 Initial Training is expressed as requiring 12 days. For follow-on courses listed in paragraph I.H.4.b for Course Length it is stated, "No change when IMD HUMS is incorporated" for all listed courses. Whether it is one day or twelve, inclusion of the IMD HUMS into training will require time. Either identify compensation (training topics removed to accommodate new training topics) or increase course length as indicated. Once the IMD HUMS material is incorporated, if the total additional training time (as estimated) is determined to not be required (training time is shorter than anticipated) then adjust training time downward.

INCORPORATED: Yes

REMARKS: Parts I and III corrected.

COMMENT: Element IV.B.2

Element IV.B.2 states, "no additional curricula materials will be required to support the IMD HUMS." Referencing the training time of paragraph 1 above, I predict that the IMD HUMS will encompass at least one lesson topic (requiring curriculum material) not currently in existence.

INCORPORATED: Yes

REMARKS: Some course lengths have been adjusted and others will be adjusted when evaluations are completed.

COMMENT: Part I, paragraph J.3

States, "Technical publications such as maintenance manuals, Illustrated Part Breakdowns (IPB), NATOPS manuals and checklists, and Maintenance Requirement Cards (MRC) will be produced, distributed, and supported in an Integrated Electronic Technical Manuals (IETM) format." However, every technical manual listed in Part IV.B.3 is listed as being hard copy format.

INCORPORATED: Yes

REMARKS: Manual formats were updated.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

COMMENT: General

Because IMD HUMS is to become a component topic within much larger training courses, no recommendations are made regarding applications of training technology.

INCORPORATED: No

REMARKS: This comment is for informational purposes only and does not require incorporation of changes.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

ACTIVITY NAME: Naval Aviation Maintenance Training Group Headquarters

COMMENT: Page ii

Increases in segment course length and changes in trainee throughput impact the requirements for additional manpower. An increase with either has the potential to increase manpower, instructor requirements. This paragraph needs to be updated to reflect this potential.

INCORPORATED: Yes

REMARKS: The paragraph has been modified to reflect the potential for manpower requirement changes.

COMMENT: Page I-8

Increases in segment course length and changes in trainee throughput impact the requirements for additional manpower. An increase with either has the potential to increase manpower, instructor requirements. This paragraph needs to be updated to reflect this potential.

INCORPORATED: Yes

REMARKS: The paragraph has been modified to reflect the potential for manpower requirement changes.

COMMENT: Page I-23

Increases in segment course length caused by incorporating additional IMD HUMS training into legacy “AT, AE, AM, AD” segment courses may increase segment course length. This paragraph needs to be updated to reflect this potential impact.

INCORPORATED: Yes

REMARKS: The potential impact has been added.

COMMENT: Page I-24

Increases in segment course length caused by incorporating additional IMD HUMS training into legacy “AT, AE, AM, AD” segment courses may increase segment course length. This paragraph needs to be updated to reflect this potential impact.

INCORPORATED: Yes

REMARKS: The potential impact has been added.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

COMMENT: Page I-25

Increases in segment course length caused by incorporating additional IMD HUMS training into legacy “AT, AE, AM, AD” segment courses may increase segment course length. This paragraph needs to be updated to reflect this potential impact.

INCORPORATED: Yes

REMARKS: The potential impact has been added.

COMMENT: Page I-26

Model Manager for segment course C-102-9406 in training tracks D/E-102-0820 is MTU 1022 and not 1066. Under location it should be MTU 1022 NAMTRAU North Island vice MTU 1067. Please update to reflect correct MTU and Manager.

INCORPORATED: Yes

REMARKS: Information updated.

COMMENT: Page I-27

Model Manager for segment course C-102-9409 in training tracks D/E-102-0825 is MTU 1022 and not 1066. Under location it should be MTU 1022 NAMTRAU North Island vice MTU 1067. Please update to reflect correct MTU and Manager.

INCORPORATED: Yes

REMARKS: Information updated.

COMMENT: Page I-27

Model Manager for segment course C-601-9408 in training tracks D/E-102-0811 is MTU 1022 and not 1066. Under location it should be MTU 1022 NAMTRAU North Island vice MTU 1067. Please update to reflect correct MTU and Manager.

INCORPORATED: Yes

REMARKS: Information updated.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
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COMMENT: Page I-29

Model Manager for segment course C-601-9407 in training tracks D/E-102-0813 is MTU 1022 and not 1066. Under location it should be MTU 1022 NAMTRAU North Island vice MTU 1067. Please update to reflect correct MTU and Manager.

INCORPORATED: Yes

REMARKS: Information updated.

COMMENT: Page I-30

CIN should be D/E-602-0855; Model Manager for segment course C-602-9409 should be MTU 1022 and not 1066; Locations should be MTU 1066 Mayport, MTU 1022 North Island and MTU 1005 Jacksonville; Length may change with additional IMD HUMS training being added.

INCORPORATED: Yes

REMARKS: Information updated.

COMMENT: Page I-31

Model Manager for segment course C-602-9407 is MTU 1022 and not 1066. Model Manager; Locations should be MTU 1066 Mayport, MTU-1022 North Island and MTU-1005 Jacksonville; Length may change with additional IMD HUMS training being added. Please update to reflect correct MTU and Manager.

INCORPORATED: Yes

REMARKS: Information updated.

COMMENT: Page I-32

CIN should be D/E-602-0883; Model Manager for segment course C-603-9408 is MTU 1022 and not 1066. Locations should be MTU 1066 Mayport, MTU 1022 North Island and MTU 1005 Jacksonville; Length may change with additional IMD HUMS training being added. Please update to reflect correct MTU and Manager.

INCORPORATED: Yes

REMARKS: Information updated.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

COMMENT: Page I-33

Model Manager for segment course C-603-9407 is MTU 1022 and not 1066; Locations should be MTU 1066 Mayport, MTU 1022 North Island, and MTU 1005 Jacksonville; Length may change with additional IMD HUMS training being added. Please update to reflect correct MTU and Manager.

INCORPORATED: Yes

REMARKS: Information updated.

COMMENT: Page I-34

AD 8378 D/E-601-0811 should be D/E-602-0810

INCORPORATED: Yes

REMARKS: CIN corrected.

COMMENT: Page I-35

AE 8378 D/E-602-0851 should be D/E-602-0855

INCORPORATED: Yes

REMARKS: CIN corrected.

COMMENT: Page I-34

AM 8378 D/E-602-0880 should be D/E-602-0883

INCORPORATED: Yes

REMARKS: CIN corrected.

COMMENT: Page II-1, paragraph II.A.3.

Increases in segment course length impacts the requirements for additional manpower. An increase in course length to add IMD HUMS training has the potential to increase instructor requirements. This paragraph needs to be updated to reflect this potential impact.

INCORPORATED: Yes

REMARKS: Note 2 added to reflect this potential.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
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COMMENT: Page III-1, elements III.A.2.a, III.A.2.b, and III.A.3.

Increases in segment course length impact the requirements for additional manpower. An increase in existing legacy course length to add IMD HUMS training has the potential to increase instructor requirements. Additionally, the existing systems will have to be trained along with IMD HUMS until one completely replaces the other. This means that both will be trained for some period of time. These paragraphs need to be updated to reflect this.

INCORPORATED: Yes

REMARKS: Note updated to reflect course length increases anticipated.

COMMENT: Page III-3, element III.A.1

Update Activity Destination to reflect the MTU at North Island to be 1022 vice 1067.

INCORPORATED: Yes

REMARKS: MTU information updated.

COMMENT: Page IV-16, element IV.B.2.

Additional training materials will be required to support IMD HUMS. Additional curriculum materials in the form of Lesson Plans (LP), Training Course Control Documents, Trainee Guide Book (TGB), tests with test plan, and possibly graphics and/or Instructional Multi Media (IMI). These materials are contracted for by the Program Manager, with inputs from NAMTRAGRU and provided to NAMTRAGRU to train.

INCORPORATED: Yes

REMARKS: Information incorporated into note.

COMMENT: Part IV

H-60 technical manuals are no longer in hard copy. They are in the electronic form, IETMS. Please verify hard copy requirements.

INCORPORATED: Yes

REMARKS: Manual formats updated.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
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COMMENT: General

NAMTRAU Norfolk will become a training site for MH-60S “AE” and an H-60 training site for “AD, AM, and PC”. If IMD HUMS impacts these ratings, this additional training site must be considered in this NTSP.

INCORPORATED: No

REMARKS: The process of establishing a training site at Norfolk, Virginia, is currently in place and the information will be available in the future. This information will be included in updates to this NTSP and in updates to the appropriate platform NTSPs.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
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ACTIVITY NAME: Naval Aviation Maintenance Training Marine Unit New River

COMMENT: Page I-1

This system should be incorporated onto the Maintenance Trainers at least six months prior to induction to fleet squadrons. Publications and maintainer training should be provided to the instructors of the Naval Air Maintenance Training Marine Units, and Naval Air Maintenance Training Units supporting the CH-53E and SH-60B Aircraft prior to the fleet getting the mods.

INCORPORATED: No

REMARKS: Will be incorporated at the completion of Val/Ver and in conjunction with fleet installations.

COMMENT: Page I-1, paragraph 1

States that the SH-60B and the CH-53E will receive IMD HUMS. However, the CH-53D PJT and the CH-53AD publications will receive the changes. If the CH-53D changes are in reference to envisions that all Navy and Marine Corps rotary wing aircraft will receive IMD HUMS, what about the V-22 and CH-46? Add the V-22 and CH-46 or delete all references to the CH-53D from the NTSP.

INCORPORATED: No

REMARKS: Current status of IMD HUMS installation concerns only the CH-53E and SH-60. As other aircraft are included in the IMD HUMS program, their information will be included in updates to this NTSP.

COMMENT: Page I-23

The current M-Track (M-102-2731) is 107 days not 130.
CH-53D/E CNI OMA C-102-9945B is 200 periods
CH-53D/E E&I OMA C-602-9441A is 240 periods
CH53D/E AFCS OMA C-602-9451A is 160 periods
Command Indoc C-600-3601A is 16 periods
Total M-track is 616 periods or 107 days

Adding this material will increase training time of the track and increase the instructor computations.

INCORPORATED: Yes

REMARKS: Course lengths updated.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
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COMMENT: Page I-24

The current M-Track (M-601-2720) is 92 days not 86. This training track is changing to the following and will become:

CH-53 BASIC HELO MECHC-602-4450 is 128 periods

CH-53E HELO MECH C-602-4452 is 192 periods

CORROSION CONTROL C-600-3180A is 14 periods

COMMAND INDOC C-600-3601A is 16 periods

Total M-track 350 periods or 60 days

INCORPORATED: Yes

REMARKS: Course length updated to 92 days.

COMMENT: Page IV-11

NTSP indicates that this will affect the CH-53D Practical Job Trainer. The CH-53D is not listed in Part I of this NTSP anywhere. Will this system be incorporated on the CH-53D?

INCORPORATED: No

REMARKS: Current status of IMD HUMS installation concerns only the CH-53E and SH-60. As other aircraft are included in the IMD HUMS program their information will be included in updates to this NTSP. The CH-53D Practical Job Trainer supports basic helicopter mechanic organizational maintenance.

COMMENT: Page IV-24

A1-H53CE-320-100 and the A1-H53CE-020-200 do not exist.

INCORPORATED: Yes

REMARKS: Technical Manual numbers were incorrect. Updated numbers.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

ACTIVITY NAME: Naval Aviation Maintenance Training Unit North Island

COMMENT: Page I-7, paragraph 2.a

NECs needed for AMs and AEs.

INCORPORATED: Yes

REMARKS: Listed as an inclusive group (and Navy Aviation Electrician's Mates (AE), Navy Aviation Structural Mechanics (AM), and Navy Aviation Machinist's Mates (AD) with NECs 8378 or 8878.

COMMENT: Page I-26

Length will be affected by the incorporation of IMDHUMS due to additional principal of operations, lab, and maintenance. An additional four days will be necessary.

INCORPORATED: Yes

REMARKS: Course length shown with current track and with IMD HUMS upgraded track.

COMMENT: Page I-26

Add "Designated AT" in addition to current prerequisites.

INCORPORATED: No

REMARKS: Due to the many individual prerequisites that individual commands and positions may require, standard practice is to list prerequisite courses only.

COMMENT: Page I-27

Length will be affected by the incorporation of IMDHUMS due to additional principal of operations, lab, and maintenance. An additional one day will be necessary.

INCORPORATED: Yes

REMARKS: Course length shown with current track and with IMD HUMS upgraded track.

COMMENT: Page I-27

Add "Designated AT and D/E-102-0820."

INCORPORATED: Yes

REMARKS: Course CIN was added, AT designation was not included.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
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COMMENT: Page I-28

CIN D/E601-0811 is incorrect; the correct CIN is E602-0810.

INCORPORATED: Yes

REMARKS: CIN corrected; however it is D/E and was added as such.

COMMENT: Page I-28

Model Manager MTU 1066 Mayport is incorrect; the correct model manager is MTU 1022 NAMTRAU North Island

INCORPORATED: Yes

REMARKS: Model Manager changed to MTU 1022.

COMMENT: Page I-28

Add "Designated AD" in addition to current prerequisites

INCORPORATED: No

REMARKS: Refer to remarks on previous page for "AT designation" comment.

COMMENT: Page I-28

The course length will be affected by the addition of the IMD HUMS in the curriculum. It will be necessary to explain the difference between IMD HUMS and ATABS.

INCORPORATED: Yes

REMARKS: Course length annotated with a comment concerning IMD HUMS.

COMMENT: Page I-29

The course length will be affected by the addition of the IMD HUMS in the curriculum. It will be necessary to explain the difference between IMD HUMS and the ATABS.

INCORPORATED: Yes

REMARKS: Course length annotated with a comment concerning IMD HUMS.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

COMMENT: Page I-29

Add "E-4 or above and D/E-602-0810" to prerequisites

INCORPORATED: Yes

REMARKS: Course CIN added, E-4 requirement was not.

COMMENT: Page I-32

The CIN should be D/E-602-0883

INCORPORATED: Yes

REMARKS: CIN was corrected under previous comments.

COMMENT: Page I-32

The length of the course is 32 days.

INCORPORATED: No

REMARKS: OPNAV (N789H) directs the use of OATMS for course information. OATMS states course length as 36 days. CANTRAC course length is 32 days.

COMMENT: Page I-32

The prerequisite for the class should read Designated AM

INCORPORATED: No

REMARKS: Covered under previous comments.

COMMENT: Page I-33

The prerequisite for the class should say D/E-602-0883, H-60 Airframes and Related Systems (Initial) Organization Maintenance and E-4 or above

INCORPORATED: Yes

REMARKS: CIN was corrected under previous comments, E-4 requirement was not added.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
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COMMENT: Page I-34

AM 8378. Student doesn't have to have the A school and the Initial course number is wrong as stated above.

INCORPORATED: No

REMARKS: OATMS and CANTRAC both state C-603-0175 as a prerequisite. CIN was corrected under previous comments.

COMMENT: Page I-35

Onboard (in-service) training, it says "ALL" our current SH-60B O-level courses have been integrated into CBT format using CAI/ICW courseware. This is incorrect.

INCORPORATED: Yes

REMARKS: Updated information.

COMMENT: Page I-39

Shouldn't it be 5/5 delivered to HSL-41 for FY01?

INCORPORATED: No

REMARKS: Five units were delivered in FY01, however three units were installed in FY02, and two units are being held as spares.

COMMENT: Page IV-11

D/E-602-0851 should be D/E-602-0855

INCORPORATED: Yes

REMARKS: CIN was corrected under previous comments.

COMMENT: Page IV-12

C-603-9408 Track should read D-602-0883

INCORPORATED: Yes

REMARKS: CIN was corrected under previous comments.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

COMMENT: Pages IV-12 and IV-13

Add C-602-9407 (Track D-602-9407) to IV.A.2, Device: SH-60 Composite Maintenance Trainer

INCORPORATED: No

REMARKS: Segment course C-602-9407 falls under Track D/E-602-0854. No reference to D-602-9407 can be found. If there is a track with this number that needs to be added, please contact me (at the number listed on the title page) with the information and I will add it.

COMMENT: Page IV-13

C-603-9408 Track should read D-602-0883

INCORPORATED: Yes

REMARKS: CIN was corrected under previous comments.

COMMENT: Page IV-14

D/E-602-0851 should be D/E-602-0855

INCORPORATED: Yes

REMARKS: CIN was corrected under previous comments.

COMMENT: Pages IV-33 and IV-34

D/E-602-0851 should be D/E-602-0855

INCORPORATED: Yes

REMARKS: CIN was corrected under previous comments.

COMMENT: Page IV-35

C-603-9408 Track should read D-602-0883

INCORPORATED: Yes

REMARKS: CIN was corrected under previous comments.

**COMMENTS / RECOMMENDATIONS ON THE
INTEGRATED MECHANICAL DIAGNOSTICS
HEALTH AND USAGE MONITORING SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN**

COMMENT: Page IV-36

C-603-9408 Track should read D-602-0883

INCORPORATED: Yes

REMARKS: CIN was corrected under previous comments.

COMMENT: Overall

MTU 1067 has been renumbered to MTU 1022. This affects all course references for
NAMTRAU North Island.

INCORPORATED: Yes

REMARKS: All references to MTU 1067 have been changed to MTU 1022.